

AWARD/CONTRACT		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)		RATING		PAGE OF PAGES 1 63	
2. CONTRACT (Proc. Inst. Ident.) NO. EP-C-14-001				3. EFFECTIVE DATE See Block 20C		4. REQUISITION/PURCHASE REQUEST/PROJECT NO. PR-ORD-14-00004	
5. ISSUED BY CODE		CPOD		6. ADMINISTERED BY (If other than Item 5)		CODE	
CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268							
7. NAME AND ADDRESS OF CONTRACTOR (No., Street, City, Country, State and ZIP Code) ICF INCORPORATED, L.L.C. Attn: Frances Schossow 9300 LEE HIGHWAY (b)(4) FAIRFAX VA 220316050				8. DELIVERY <input type="checkbox"/> FOB ORIGIN <input checked="" type="checkbox"/> OTHER (See below)			
				9. DISCOUNT FOR PROMPT PAYMENT			
				10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN		ITEM	
CODE 072648579		FACILITY CODE					
11. SHIP TO/MARK FOR CODE		CPOD		12. PAYMENT WILL BE MADE BY CODE		RTP FMC	
CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268				RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711			
13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304 (c) () <input type="checkbox"/> 41 U.S.C. 253 (c) ()				14. ACCOUNTING AND APPROPRIATION DATA See Schedule			
15A. ITEM NO	15B. SUPPLIES/SERVICES			15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
	Continued						
15G. TOTAL AMOUNT OF CONTRACT						\$33,996,286.00	
16. TABLE OF CONTENTS							
(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
	A	SOLICITATION/CONTRACT FORM			I	CONTRACT CLAUSES	
	B	SUPPLIES OR SERVICES AND PRICES/COSTS		PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
	C	DESCRIPTION/SPECS./WORK STATEMENT			J	LIST OF ATTACHMENTS	
	D	PACKAGING AND MARKING		PART IV - REPRESENTATIONS AND INSTRUCTIONS			
	E	INSPECTION AND ACCEPTANCE			K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	
	F	DELIVERIES OR PERFORMANCE			L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
	G	CONTRACT ADMINISTRATION DATA			M	EVALUATION FACTORS FOR AWARD	
	H	SPECIAL CONTRACT REQUIREMENTS					
CONTRACTING OFFICER WILL COMPLETE ITEM 17 (SEALED-BID OR NEGOTIATED PROCUREMENT) OR 18 (SEALED-BID PROCUREMENT) AS APPLICABLE							
17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 1 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)				18. <input type="checkbox"/> SEALED-BID AWARD (Contractor is not required to sign this document.) Your bid on Solicitation Number SOL-CI-13-00003, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your bid, and (b) this award/contract. No further contractual document is necessary. (Block 18 should be checked only when awarding a sealed-bid contract.)			
19A. NAME AND TITLE OF SIGNER (Type or print)				20A. NAME OF CONTRACTING OFFICER Matthew Growney			
19B. NAME OF CONTRACTOR		19C. DATE SIGNED		20B. UNITED STATES OF AMERICA		20C. DATE SIGNED	
BY (Signature of person authorized to sign)				BY (Signature of the Contracting Officer)			

CONTINUATION SHEET

 REFERENCE NO. OF DOCUMENT BEING CONTINUED
 EP-C-14-001

PAGE 2 OF 63

 NAME OF OFFEROR OR CONTRACTOR
 ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	DUNS Number: 072648579 Technical Support for Human Health Risk Assessment Max Expire Date: 10/31/2018 Accounting Info: 13-14-C-262H000-401F84-2532--26A5C-13262HC110-001 BFY: 13 EFY: 14 Fund: C Budget Org: 262H000 Program (PRC): 401F84 Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 13262HC110-001 FOB: Destination Period of Performance: 11/01/2013 to 10/31/2014				
0001	Contract Ceiling and Funding for Base Period Incrementally Funded Amount: \$100,000.00				
0001LOE	Level of Effort Base Period	30000	HR	0.00	0.00
0001OPT	OPTION Optional Contract Ceiling and Funding Base Period (Option Line Item)				3,954,720.00
0001OPTLOE	OPTION Optional Level of Effort Base Period (Option Line Item)	46380	HR	0.00	0.00
0011	Contract Ceiling and Funding Option Period 1 (Option Line Item)				2,614,952.00
0011LOE	Level of Effort Option Period 1 (Option Line Item)	30000	HR	0.00	0.00
0011OPT	OPTION Optional Contract Ceiling and Funding Option Period 1 (Option Line Item)				4,042,680.00
0011OPTLOE	OPTION Optional Level of Effort Option Period 1 (Option Line Item)	46380	HR	0.00	0.00
0021	Contract Ceiling and Funding Option Period 2 (Option Line Item)				2,673,042.00
0021LOE	Level of Effort Option Period 2 (Option Line Item)	30000	HR	0.00	0.00
0021OPT	OPTION Optional Contract Ceiling and Funding Option Period 2 (Option Line Item)				4,132,460.00
0021OPTLOE	OPTION Optional Level of Effort Option Period 2 (Option Line Item)	46380	HR	0.00	0.00
	Continued ...				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-C-14-001

PAGE 3 OF 63

NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
0031	Contract Ceiling and Funding Option Period 3 (Option Line Item)				2,732,592.00
0031LOE	Level of Effort Option Period 3 (Option Line Item)	30000	HR	0.00	0.00
0031OPT	OPTION Optional Contract Ceiling and Funding Option Period 3 (Option Line Item)				4,224,560.00
0031OPTLOE	OPTIONAL Level of Effort Option Period 3 (Option Line Item)	46380	HR	0.00	0.00
0041	Contract Ceiling and Funding Option Period 4 (Option Line Item)				2,774,254.00
0041LOE	Level of Effort Option Period 4 (Option Line Item)	30000	HR	0.00	0.00
0041OPT	OPTION Optional Contract Ceiling and Funding Option Period 4 (Option Line Item)				4,288,940.00
0041OPTLOE	OPTIONAL Level of Effort Option Period 4 (Option Line Item)	46380	HR	0.00	0.00
	The obligated amount of award: \$100,000.00. The total for this award is shown in box 15G.				

SOLICITATION/CONTRACT FORM	3
SECTION B -SUPPLIES OR SERVICES/PRICES	3
B.1 1552.211-73 LEVEL OF EFFORT - COST REIMBURSEMENT TERM CONTRACT (APR 1984) (DEVIATION) (AUG 1995)	3
B.2 1552.211-74 WORK ASSIGNMENTS (APR 1984) - ALTERNATE I (MAY 1994) DEVIATION	3
B.3 LOCAL CLAUSE EPA-B-32-101 LIMITATION OF FUNDS NOTICE	4
Section C -Description/Specifications	4
C.1 1552.211-79 COMPLIANCE WITH EPA POLICIES FOR INFORMATION RESOURCES MANAGEMENT. (JAN 2012)	4
C.2 LOCAL CLAUSE EPA-C-10-103 INCORPORATION OF CONTRACTOR'S QUALITY ASSURANCE (QA) PLAN	5
C.3 LOCAL CLAUSE EPA-C-10-101 STATEMENT OF WORK/PERFORMANCE WORK STATEMENT/SPECIFICATIONS	5
SECTION D -PACKAGING AND MARKING	7
SECTION E -INSPECTION AND ACCEPTANCE	7
E.1 52.246-11 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT. (FEB 1999)	7
SECTION F -DELIVERIES OR PERFORMANCE	10
F.1 1552.211-70 REPORTS OF WORK (OCT 2000)- ALTERNATE 1 OCT (2000)	10
F.2 1552.211-75 WORKING FILES. (APR 1984)	11
F.3 1552.211-78 MANAGEMENT CONSULTING SERVICES. (APR 1985)	11
F.4 1552.242-71 CONTRACTOR PERFORMANCE EVALUATIONS (OCT 2011)	11
F.5 LOCAL CLAUSE EPA-F-12-101 PERIOD OF PERFORMANCE	11
SECTION G -CONTRACT ADMINISTRATION DATA	13
G.1 1552.216-74 PAYMENT OF FEE. (MAY 1991)	13
G.2 1552.232-70 SUBMISSION OF INVOICES (JUN 1996) DEVIATION	13
G.3 1552.242-70 INDIRECT COSTS (APR 1984) (DEVIATION)	19
G.4 1552.245-70 GOVERNMENT PROPERTY. (SEP 2009)	20
G.5 1552.245-71 GOVERNMENT-FURNISHED DATA. (SEP 2009)	24
G.6 LOCAL CLAUSE EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES	24
G.7 LOCAL CLAUSE EPA-G-45-101 DESIGNATION OF PROPERTY ADMINISTRATOR	25
SECTION H -SPECIAL CONTRACT REQUIREMENTS	26
H.1 1552.203-71 DISPLAY OF EPA OFFICE OF INSPECTOR GENERAL HOTLINE POSTER. (AUG 2000)	26
H.2 1552.208-70 PRINTING. (DEC 2005)	26
H.3 1552.209-71 ORGANIZATIONAL CONFLICTS OF INTEREST. (MAY 1994) -- ALTERNATE I (MAY 1994)	27
H.4 1552.209-73 NOTIFICATION OF CONFLICTS OF INTEREST REGARDING PERSONNEL. (MAY 1994) ALTERNATE I (JUN 1994) DEVIATION	28
H.5 1552.209-74 LIMITATION OF FUTURE CONTRACTING. (APR 2004) ALTERNATE V (HEADQUARTERS SUPPORT) (APR 2004)	28
H.6 1552.217-71 OPTION TO EXTEND THE TERM OF THE CONTRACT-COST-TYPE CONTRACT. (APR 1984)	29
H.7 1552.217-73 OPTION FOR INCREASED QUANTITY-COST-TYPE CONTRACT. (JUN 1997)	30
H.8 1552.219-73 SMALL DISADVANTAGED BUSINESS TARGETS. (OCT 2000)	31
H.9 1552.223-70 PROTECTION OF HUMAN SUBJECTS (APR 1984)	32
H.10 1552.228-70 INSURANCE-- LIABILITY TO THIRD PERSONS. (OCT 2000)	32
H.11 1552.235-70 SCREENING BUSINESS INFORMATION FOR CLAIMS OF CONFIDENTIALITY. (APR 1984)	32
H.12 1552.235-71 TREATMENT OF CONFIDENTIAL BUSINESS INFORMATION. (APR 1984)	33
H.13 1552.235-73 ACCESS TO FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT CONFIDENTIAL BUSINESS INFORMATION (APR 1996)	34
H.14 1552.235-75 ACCESS TO TOXIC SUBSTANCES CONTROL ACT CONFIDENTIAL BUSINESS	

INFORMATION (APR 1996).....	34
H.15 1552.235-76 TREATMEN OF CONFIDENTIAL BUSINESS INFORMATION (TSCA) (APR 1996)	34
H.16 1552.235-77 DATA SECURITY FOR FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT CONFIDENTIAL BUSINESS INFORMATION. (DEC 1997)	35
H.17 1552.235-78 DATA SECURITY FOR TOXIC SUBSTANCES CONTROL ACT CONFIDENTIAL BUSINESS INFORMATION. (DEC 1997)	36
H.18 1552.235-79 RELEASE OF CONTRACTOR CONFIDENTIAL BUSINESS INFORMATION (APR 1996).....	37
H.19 1552.235-80 ACCESS TO CONFIDENTIAL BUSINESS INFORMATION (OCT 2000)	38
H.20 1552.237-70 CONTRACT PUBLICATION REVIEW PROCEDURES. (APR 1984)	39
H.21 1552.237-71 TECHNICAL DIRECTION. (AUG 2009)	39
H.22 1552.237-72 KEY PERSONNEL. (APR 1984).....	41
H.23 1552.237-76 GOVERNMENT-CONTRACTOR RELATIONS. (JUN 1999)	41
H.24 1552.239-70 REHABILITATION ACT NOTICE. (OCT 2000).....	43
H.25 LOCAL CLAUSE EPA-H-27-103 APPLICATION OF RIGHTS IN DATA – SPECIAL WORKS CLAUSE.....	43
H.26 LOCAL CLAUSE EPA-H-42-102 UTILIZATION OF FEDCONNECT FOR CONTRACT ADMINISTRATION (MAR 2013).....	43
H.27 LOCAL CLAUSE EPA H-31-104 APPROVAL OF CONTRACTOR TRAVEL	44
H.28 EPA-H-28-102 MINIMUM INSURANCE REQUIREMENTS	44
H.29 EPA-H-09-107 – Unpaid Federal Tax Liability & Felony Criminal Violation Certification (APR 2012)	45
SECTION I –CONTRACT CLAUSES.....	46
I.1 52.203-14 DISPLAY OF HOTLINE POSTER(S). (DEC 2007)	49
I.2 52.209-9 UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS (JUL 2013)	50
I.3 52.217-8 OPTION TO EXTEND SERVICES. (NOV 1999).....	51
I.4 52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS. (JAN 2011)	51
I.5 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION. (JUL 2013)	52
I.6 52.222-2 PAYMENT FOR OVERTIME PREMIUMS. (JUL 1990)	54
I.7 52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED ITEMS. (MAY 2008).....	55
I.8 52.244-2 SUBCONTRACTS. (OCT 2010) - ALTERNATE I (JUN 2007)	55
I.9 52.247-67 SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT. (FEB 2006).....	58
I.10 52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998).....	58
I.11 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES. (APR 1984)	58
I.12 1552.227-76 ALT I PROJECT EMPLOYEE CONFIDENTIALITY AGREEMENT (MAY 1994) ALTERNATE I (JUNE 1994) (DEVIATION)	58
I.13 52.247-1 COMMERCIAL BILL OF LADING NOTATIONS (FEB 2006)	59
Section J -List of Documents, Exhibits and Other Attachments	60

SOLICITATION/CONTRACT FORM

SECTION B -SUPPLIES OR SERVICES/PRICES

B.1 1552.211-73 LEVEL OF EFFORT - COST REIMBURSEMENT TERM CONTRACT (APR 1984) (DEVIATION) (AUG 1995)

(a) The Contractor shall perform all work and provide all required reports within the level of effort specified below. The Government will order **30,000** direct labor hours for the base period which represents the Government's best estimate of the level of effort required to fulfill these requirements.

(b) Direct labor includes personnel such as engineers, scientists, draftsmen, technicians, statisticians, and programmers and not support personnel such as company management, typists, and key punch operators even though such support personnel are normally treated as direct labor by the Contractor. The level of effort specified in paragraph (a) includes Contractor, subcontractor, and consultant labor hours.

(c) Under any circumstances, if the Government orders or the Contractor provides less than 90 percent of the level of effort specified for the base period or any optional period exercised, an equitable downward adjustment of the fixed fee, if any, for that period will be made. The Government may require the Contractor to provide additional effort up to 110 percent of the level of effort for any period until the estimated cost for that period has been reached. However, this additional effort shall not result in any increase in the fixed fee, if any. If this is a cost-plus-incentive-fee (CPIF) contract, the term "fee" in this paragraph means "base fee and incentive fee." If this is a cost-plus-award-fee (CPAF) contract, the term "fee" in this paragraph means "base fee and award fee."

(d) If the level of effort specified to be ordered during a given base or option period is not ordered during that period, that level of effort may not be accumulated and ordered during a subsequent period.

(e) These terms and conditions do not supersede the requirements of either the "Limitation of Cost" or "Limitation of Funds" clauses.

B.2 1552.211-74 WORK ASSIGNMENTS (APR 1984) - ALTERNATE I (MAY 1994) DEVIATION

(a) The contractor shall perform work under this contract as specified in written work assignments issued by the Contracting Officer.

(b) Each work assignment will include (1) a numerical designation, (2) the estimate of required labor hours, (3) the period of performance and schedule of deliverables, and (4) the description of the work.

(c) The Contractor shall acknowledge receipt of each work assignment by returning to the Contracting Officer a signed copy of the work assignment within five (5) calendar days after its receipt. The Contractor shall begin work immediately upon receipt of a work assignment. Within fifteen (15) calendar days after receipt of a work assignment, the Contractor shall submit 1 copy of a work plan to the Project Officer and 1 copy to the Contracting Officer. The work plan shall include a detailed technical and staffing plan and a detailed cost estimate. Within fifteen (15) calendar days after receipt of the work plan, the Contracting Officer will provide written approval or disapproval of it to the Contractor. If the Contractor has not received approval on a work plan within forty-five (45) calendar days after its submission, the Contractor shall stop work on that work assignment. Also, if the Contracting Officer disapproves a work plan, the Contractor shall stop work until the problem causing the disapproval is resolved. In either case, the Contractor shall resume work only when the Contracting Officer finally approves the work plan.

(d) This clause does not change the requirements of the "Level of Effort" clause, nor the notification requirements of either the "Limitation of Cost" or "Limitation of Funds" clauses.

(e) Work assignments shall not allow for any change to the terms or conditions of the contract. Where any language in the work assignment may suggest a change to the terms or conditions, the Contractor shall immediately notify the Contracting Officer.

(f) Within 20 days of receipt of the work assignment or similar tasking document, the Contractor shall provide a conflict of interest certification.

Before submitting the conflict of interest certification, the contractor shall search its records accumulated, at a minimum, over the past three years immediately prior to the receipt of the work assignment or similar tasking document. In the COI certification, the Contractor must certify to the best of the Contractor's knowledge and belief, that all actual or potential organizational conflicts of interest have been reported to the Contracting Officer or that to the best of the Contractor's knowledge and belief, no actual or potential organizational conflicts of interest exist. In addition, the Contractor must certify that its personnel who perform work under this work assignment or relating to this work assignment have been informed of their obligation to report personal and organizational conflicts of interest to the Contractor. The certification shall also include a statement that the Contractor recognizes its continuing obligation to identify and report any actual or potential conflicts of interest arising during performance of this work assignment or other work related to this site.

B.3 LOCAL CLAUSE EPA-B-32-101 LIMITATION OF FUNDS NOTICE

(a) Pursuant to the Limitation of Funds clause, incremental funding in the amount of \$(b)(4) is allotted to cover estimated cost. Funding in the amount of \$(b)(4) is provided to cover the corresponding increment of fixed fee. The amount allotted for costs is estimated to cover the contractor's performance through 11/21/13.

(b) When the contract is fully funded as specified in the Estimated Cost and Fixed Fee Clause (EP 52.216-190), the Limitation of Cost clause shall become applicable.

(c) Recapitulation of Funds

Funding Action	Estimated Cost	Fixed Fee	Total CPFF
Initial Funding	\$(b)(4)	\$(b)(4)	\$100,000.00
Total Funded	\$	\$	\$100,000.00
Total Per Contract	\$	\$	\$2,558,086.00
Balance Unfunded	\$	\$	\$2,458,086.00

B.4 EPA-B-16-102 ESTIMATED COST AND FIXED FEE

(a) The estimated cost of this contract is \$(b)(4)

(b) The fixed fee is \$(b)(4)

(c) The total estimated cost and fixed fee is \$2,558,086.00.

Section C -Description/Specifications

C.1 1552.211-79 COMPLIANCE WITH EPA POLICIES FOR INFORMATION RESOURCES

MANAGEMENT. (JAN 2012)

Compliance with EPA Policies for Information Resources Management

(a) Definition. Information Resources Management (IRM) is defined as any planning, budgeting, organizing, directing, training, promoting, controlling, and managing activities associated with the burden, collection, creation, use and dissemination of information. IRM includes both information itself and the management of information and related resources such as personnel, equipment, funds, and technology. Examples of these services include but are not limited to the following:

(1) The acquisition, creation, or modification of a computer program or automated data base for delivery to EPA or use by EPA or contractors operating EPA programs.

(2) The analysis of requirements for, study of the feasibility of, evaluation of alternatives for, or design and development of a computer program or automated data base for use by EPA or contractors operating EPA programs.

(3) Services that provide EPA personnel access to or use of computer or word processing equipment, software, or related services.

(4) Services that provide EPA personnel access to or use of: Data communications; electronic messaging services or capabilities; electronic bulletin boards, or other forms of electronic information dissemination; electronic record-keeping; or any other automated information services.

(b) General. The Contractor shall perform any IRM-related work under this contract in accordance with the IRM policies, standards, and procedures set forth on the Office of Environmental Information policy Web site. Upon receipt of a work request (i.e. delivery order, task order, or work assignment), the Contractor shall check this listing of directives. The applicable directives for performance of the work request are those in effect on the date of issuance of the work request. The 2100 Series (2100-2199) of the Agency's Directive System contains the majority of the Agency's IRM policies, standards, and procedures.

(c) Section 508 requirements. Contract deliverables are required to be compliant with Section 508 requirements. The Environmental Protection Agency policy for 508 compliance can be found on the Agency's Directive System identified in section (d) of this clause under policy number CIO 2130.0, Accessible Electronic and Information Technology. Additional information on Section 508 including EPA's 508 policy can be found at www.epa.gov/accessibility.

(d) Electronic access. A complete listing, including full text, of documents included in the 2100 Series of the Agency's Directive System is maintained on the EPA Public Access Server on the Internet at <http://epa.gov/docs/irmpoli8/>.

C.2 LOCAL CLAUSE EPA-C-10-103 INCORPORATION OF CONTRACTOR'S QUALITY ASSURANCE (QA) PLAN

The Contractor shall adhere to the procedures set forth in its QA plan dated June 24, 2013, which is incorporated by reference.

C.3 LOCAL CLAUSE EPA-C-10-101 STATEMENT OF WORK/PERFORMANCE WORK STATEMENT/SPECIFICATIONS

The Contractor shall furnish the necessary personnel, material, equipment, services, and facilities (except as otherwise specified), to perform the Performance Work Statement (PWS). Work will be ordered against the subject PWS through Contracting Officer issuance of Work Assignments.

SECTION D -PACKAGING AND MARKING

There are no clauses in this section.

SECTION E -INSPECTION AND ACCEPTANCE

52.246-5 INSPECTION OF SERVICES - COST-REIMBURSEMENT. (APR 1984)

E.1 52.246-11 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT. (FEB 1999)

The Contractor shall comply with the higher-level quality standard selected below.

	<u>Title</u>	<u>Numbering</u>	<u>Date</u>	<u>Tailoring</u>
[X]	Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs	ANSI/ASQC E4	1994	See below

As authorized by FAR 52.246-11, the higher-level quality standard ANSI/ASQC E4 is tailored as follows:

The solicitation and contract require the offeror/contractor to demonstrate conformance to ANSI/ASQC E4 by submitting the quality documentation described below.

In addition, after award of the contract, the Contractor shall revise, when applicable, quality documentation submitted before award to address specific comments provided by EPA and submit the revised documentation to the Contracting Officer's Representative.

After award of the contract, the Contractor shall also implement all quality documentation approved by the Government.

- A. **Pre-award Documentation:** The offeror must submit the following quality system documentation as a separate and identifiable part of its technical proposal:

	<u>Documentation</u>	<u>Specifications</u>
[X]	Quality Management Plan	<u>EPA Requirements for Quality Management Plans (QA/R-2)</u> [dated 03/20/01]
[]	Joint Quality Management Plan/Quality Assurance Project Plan for the contract	<u>EPA Requirements for Quality Management Plans (QA/R-2)</u> [dated 03/20/01] and <u>EPA Requirements for Quality Assurance Project Plans (QA/R)</u> [dated 03/20/01]
[]	Programmatic Quality Assurance Project Plan for the entire program (contract)	<u>EPA Requirements for Quality Assurance Project Plans (QA/R-5)</u> [dated 03/20/01]

☐ Other Equivalent:

This documentation will be prepared in accordance with the specifications identified above, or equivalent specifications defined by EPA. The offeror shall describe their plan for covering the costs associated with the required documentation. Work involving environmental data generation or use shall not commence until the Government has approved this documentation and incorporated it into the contract.

B. **Post-award Documentation:** The Contractor shall submit the following quality system documentation to the Contracting Officer's Representative at the time frames identified below:

C.

<u>Documentation</u>	<u>Specification</u>	<u>Due After</u>
<input type="checkbox"/> Quality Management Plan	<u>EPA Requirements for Quality Management Plans (QA/R-2)</u> [dated 03/20/01]	Award of contract
<input type="checkbox"/> Joint Quality Management Plan/Quality Assurance Project Plan for the contract	<u>EPA Requirements for Quality Management Plans (QA/R-2)</u> [dated 03/20/01] and <u>EPA Requirements for Quality Assurance Project Plans (QA/R-5)</u> [dated 03/20/02]	Award of contract
<input type="checkbox"/> Quality Assurance Project Plan for the contract	<u>EPA Requirements for Quality Assurance Project Plans (QA/R-5)</u> [dated 03/20/01]	Award of contract
<input type="checkbox"/> Programmatic Quality Assurance Project Plan for the entire program (contract)	<u>EPA Requirements for Quality Assurance Project Plans (QA/R-5)</u> [dated 03/20/01]	Award of contract
<input checked="" type="checkbox"/> Quality Assurance Project Plan for each applicable project	<u>EPA Requirements for Quality Assurance Project Plans (QA/R-5)</u> [dated 03/20/01]	Issuance of statement of work for the project
<input type="checkbox"/> Project-specific supplement to Programmatic Quality Assurance Project Plan for each applicable project.	<u>EPA Requirements for Quality Assurance Project Plans (QA/R-5)</u> [dated 03/20/01]	Issuance of statement of work for the project

☐ Other Equivalent:

☐ award of contract

☐ issuance
of statement
of work for
the project

This documentation will be prepared in accordance with the specifications identified above or equivalent specifications defined by EPA. The offeror shall describe their plan for covering the costs associated with the required documentation.

The Government will review and return the quality documentation, with comments, and indicating approval or disapproval. If necessary, the contractor shall revise the documentation to address all comments and shall submit the revised documentation to the government for approval.

The Contractor shall not commence work involving environmental data generation or use until the Government has approved the quality documentation.

(Note: Statement of work includes statements of work to perform projects under work assignments, task orders, delivery orders, etc.)

SECTION F -DELIVERIES OR PERFORMANCE

52.242-15 STOP-WORK ORDER. (AUG 1989) - ALTERNATE I (APR 1984)

F.1 1552.211-70 REPORTS OF WORK (OCT 2000)- ALTERNATE 1 OCT (2000)

The Contractor shall prepare and deliver the below listed reports, including plans, evaluations, studies, analyses and manuals to the designated addressees. Each report shall cite the contract number, identify the U.S. Environmental Protection Agency as the sponsoring agency, and identify the name of the contractor preparing the report.

Required reports are:

1. MONTHLY PROGRESS REPORT

For each work assignment, the contractor shall furnish three (3) copies of a combined monthly technical and financial progress report briefly stating the progress made, including the percentage of the project completed during the reporting period. Specific discussions shall include difficulties encountered and remedial action taken during the reporting period and anticipated activity during the subsequent reporting period. In addition, the report shall specify contract financial status as follows:

- (a) For term form contracts, provide:
 - (1) Cumulative totals for the contract amounts obligated, amounts claimed, and remaining available funds. Available funds are defined as the total obligated amount less total amounts claimed.
 - (2) Cumulative labor hours and dollars, broken out by prime contractor and subcontractor (if applicable) labor category, expended from the effective date of the contract through the last day of the current reporting month. Include a cumulative incurred cost per direct labor hour average computation and compare the result to the cumulative average cost per direct labor hour derived from the estimated cost of the contract.
 - (3) Actual costs and direct labor hours expended during the current reporting month.
 - (4) Estimated costs and direct labor hours to be expended during the next reporting period.
 - (5) Actual costs and direct labor hours incurred for each Work Assignment issued and estimates of costs and man hours required to complete each Work Assignment.
 - (6) Percentage of hours and dollars complete out of total Work Assignment.
- (b) This submission does not change the notification requirements of the "Limitation of Cost" or "Limitation of Funds" clauses requiring separate written notice to the Contracting Officer.
- (c) The reports shall be submitted electronically on or before the 15th of each month following the first complete calendar month of the contract:
 - 1 copy: Contracting Officer
 - 1 copy: Project Officer
 - 1 copy: Alternate Project Officer

2. OTHER REPORTING REQUIREMENTS

- (a) Special Requirements

Each monthly report shall include a specific statement as to whether the program is or is not on schedule and within budget, and whether it is or is not expected to be completed on schedule and within budget.

(b) Work Assignment Reports

- (1) Draft Final Report: As specified on a work assignment basis, the contractor shall submit (3) copies of the draft final report to the Project Officer within 15 days of the completion of the work. The contractor shall furnish to the Contracting Officer a copy of the letter transmitting the draft report. The draft shall be typed double-spaced or space-and-a-half and shall include all pertinent material required for a final report. The Government will review the draft for approval or disapproval and provide a response to the contractor 15 calendar days after its receipt. If the Government does not provide a response within the allotted review time, the contractor immediately shall notify the Contracting Officer in writing.
- (2) Final Report: The contractor shall provide three copies (3) of the final report for each work assignment on or before the last day of the period of performance specified, which can be sent electronically.

Distribution:

1 copy: Contracting Officer
1 copy: Project Officer
1 copy: Alternate Project Officer

- (3) Quality Assurance Project Plans: The contractor shall provide quality assurance project plans specified in individual work assignments.

The OMB clearance number for progress reports delivered under this contract is 2030-2005 with an expiration date of April 30, 2015.

F.2 1552.211-75 WORKING FILES. (APR 1984)

The Contractor shall maintain accurate working files (by task or work assignment) on all work documentation including calculations, assumptions, interpretations of regulations, sources of information, and other raw data required in the performance of this contract. The Contractor shall provide the information contained in its working files upon request of the Contracting Officer.

F.3 1552.211-78 MANAGEMENT CONSULTING SERVICES. (APR 1985)

All reports containing recommendations to the Environmental Protection Agency shall include the following information on the cover of each report: (a) Name and business address of the contractor; (b) contract number; (c) contract dollar amount; (d) whether the contract was subject to full and open competition or a sole source acquisition; (e) name of the EPA Project Officer and the EPA Project Officer's office identification and location; and (f) date of report.

F.4 1552.242-71 CONTRACTOR PERFORMANCE EVALUATIONS (OCT 2011)

In accordance with Federal Acquisition Regulation (FAR) Subpart 42.15 and EPAAR 1542.15, the EPA will prepare and submit past performance evaluations to the Past Performance Information Retrieval System (PPIRS). Evaluation reports will be documented not later than 120 days after the end of an evaluation period by using the Contractor Performance Assessment Reporting System (CPARS) which has connectivity with PPIRS. Contractors must register in CPARS in order to view/comment on their past performance reports.

F.5 LOCAL CLAUSE EPA-F-12-101 PERIOD OF PERFORMANCE

The period of performance of this contract shall be from effective date of award through 10/31/2014 exclusive of all required reports.

SECTION G -CONTRACT ADMINISTRATION DATA

G.1 1552.216-74 PAYMENT OF FEE. (MAY 1991)

(a) The term fee in this clause refers to either the fixed fee under a cost-plus-fixed-fee type contract, or the base fee under a cost-plus-award-fee type contract.

(b) The Government will make provisional fee payments on the basis of percentage of work completed. Percentage of work completed is the ratio of direct labor hours performed to the direct labor hours set forth in clause 1552.211-73, Level of Effort-Cost-Reimbursement Term Contract.

G.2 1552.232-70 SUBMISSION OF INVOICES (JUN 1996) DEVIATION

In order to be considered properly submitted, an invoice or request for contract financing payment must meet the following contract requirements in addition to the requirements of FAR 32.905:

(a) Unless otherwise specified in the contract, an invoice or request for contract financing payment shall be submitted as an original and five copies. The Contractor shall submit the invoice or request for contract financing payment to the following offices/individuals designated in the contract: the original and two copies to the Accounting Operations Office shown in Block 12 on the cover of the contract; two copies to the Project Officer (the Project Officer may direct one of these copies to a separate address); and one copy to the Contracting Officer.

(b) The Contractor shall prepare its invoice or request for contract financing payment on the prescribed Government forms. Standard Forms Number 1034, Public Voucher for Purchases and Services other than Personal, shall be used by contractors to show the amount claimed for reimbursement. Standard Form 1035, Public Voucher for Purchases and Services other than Personal - Continuation Sheet, shall be used to furnish the necessary supporting detail or additional information required by the Contracting Officer. The Contractor may submit self-designed forms which contain the required information.

(c)(1) The Contractor shall prepare a contract level invoice or request for contract financing payment in accordance with the invoice preparation instructions identified as a separate attachment in Section J of the contract. If contract work is authorized by individual work assignments, the invoice or request for contract financing payment shall also include a summary of the current and cumulative amounts claimed by cost element for each work assignment and for the contract total, as well as any supporting data for each work assignment as identified in the instructions.

(2) The invoice or request for contract financing payment shall include current and cumulative charges by major cost element such as direct labor, overhead, travel, equipment, and other direct costs. For current costs, each major cost element shall include the appropriate supporting schedule identified in the invoice preparation instructions. Cumulative charges represent the net sum of current charges by cost element for the contract period.

(d)(1) The charges for subcontracts shall be further detailed in a supporting schedule showing the major cost elements for each subcontract.

(d)(2) On a case-by-case basis, when needed to verify the reasonableness of subcontractor costs, the Contracting Officer may require that the contractor obtain from the subcontractor cost information in the detail set forth in (c)(2). This information should be obtained through a means which maintains subcontractor confidentiality (for example, via sealed envelopes), if the subcontractor expresses CBI concerns.

(e) Invoices or requests for contract financing payment must clearly indicate the period of performance for which payment is requested. Separate invoices or requests for contract financing payment are required for charges

applicable to the basic contract and each option period.

(f)(1) Notwithstanding the provisions of the clause of this contract at FAR 52.216-7, Allowable Cost and Payment, invoices or requests for contract financing payment shall be submitted once per month unless there has been a demonstrated need and Contracting Officer approval for more frequent billings. When submitted on a monthly basis, the period covered by invoices or requests for contractor financing payments shall be the same as the period for monthly progress reports required under this contract.

(2) If the Contracting Officer allows submissions more frequently than monthly, one submittal each month shall have the same ending period of performance as the monthly progress report.

(3) Where cumulative amounts on the monthly progress report differ from the aggregate amounts claimed in the invoice(s) or request(s) for contract financing payments covering the same period, the contractor shall provide a reconciliation of the difference as part of the payment request.

INVOICE PREPARATION INSTRUCTIONS

SF 1034

The information which a contractor is required to submit in its Standard Form 1034 is set forth as follows:

(1) U.S. Department, Bureau, or establishment and location - insert the names and address of the servicing finance office unless the contract specifically provides otherwise.

(2) Date Voucher Prepared - insert date on which the public voucher is prepared and submitted.

(3) Contract/Delivery Order Number and Date - insert the number and date of the contract and delivery order, if applicable, under which reimbursement is claimed.

(4) Requisition Number and Date - leave blank.

(5) Voucher Number - insert the appropriate serial number of the voucher. A separate series of consecutive numbers, beginning with Number 1, shall be used by the contractor for each new contract. When an original voucher was submitted, but not paid in full because of suspended costs, resubmission vouchers should be submitted in a separate invoice showing the original voucher number and designated with the letter "R" as the last character of the number. If there is more than one resubmission, use the appropriate suffix (R2, R3, etc.)

(6) Schedule Number; Paid By; Date Invoice Received - leave blank.

(7) Discount Terms - enter terms of discount, if applicable.

(8) Payee's Account Number - this space may be used by the contractor to record the account or job number(s) assigned to the contract or may be left blank.

(9) Payee's Name and Address - show the name of the contractor exactly as it appears in the contract and its correct address, except when an assignment has been made by the contractor, or the right to receive payment has been restricted, as in the case of an advance account. When the right to receive payment is restricted, the type of information to be shown in this space shall be furnished by the Contracting Officer.

(10) Shipped From; To; Weight Government B/L Number - insert for supply contracts.

(11) Date of Delivery or Service - show the month, day and year, beginning and ending dates of incurrence of costs claimed for reimbursement. Adjustments to costs for prior periods should identify the period applicable to their incurrence, e.g., revised provisional or final indirect cost

rates, award fee, etc.

(12) Articles and Services - insert the following: "For detail, see Standard Form 1035 total amount claimed transferred from Page _____ of Standard Form 1035." Type "COST REIMBURSABLE-PROVISIONAL PAYMENT" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-PROVISIONAL PAYMENT" on the Interim public vouchers. Type "COST REIMBURSABLE-COMPLETION VOUCHER" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-COMPLETION VOUCHER" on the Completion public voucher. Type "COST REIMBURSABLE-FINAL VOUCHER" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-FINAL VOUCHER" on the Final public voucher. Type the following certification, signed by an authorized official, on the face of the Standard Form 1034.

"I certify that all payments requested are for appropriate purposes and in accordance with the agreements set forth in the contract."

(Name of Official)

(Title)

(13) Quantity; Unit Price - insert for supply contracts.

(14) Amount - insert the amount claimed for the period indicated in (11) above.

INVOICE PREPARATION INSTRUCTIONS SF 1035

The information which a contractor is required to submit in its Standard Form 1035 is set forth as follows:

- (1) U.S. Department, Bureau, or Establishment - insert the name and address of the servicing finance office.
- (2) Voucher Number - insert the voucher number as shown on the Standard Form 1034.
- (3) Schedule Number - leave blank.
- (4) Sheet Number - insert the sheet number if more than one sheet is used in numerical sequence. Use as many sheets as necessary to show the information required.
- (5) Number and Date of Order - insert payee's name and address as in the Standard Form 1034.
- (6) Articles or Services - insert the contract number as in the Standard Form 1034.
- (7) Amount - insert the latest estimated cost, fee (fixed, base, or award, as applicable), total contract value, and amount and type of fee payable (as applicable).
- (8) A summary of claimed current and cumulative costs and fee by major cost element.
Include the rate(s) at which indirect costs are claimed and indicate the base of each by identifying the line of costs to which each is applied. The rates invoiced should be as specified in the contract or by a rate agreement negotiated by EPA's Cost Policy and Rate Negotiation Branch.

- (9) The fee shall be determined in accordance with instructions appearing in the contract.

NOTE: Amounts claimed on vouchers must be based on records maintained by the contractor to show by major cost element the amounts claimed for reimbursement for each applicable contract. The records must be maintained based on the contractor's fiscal year and should include reconciliations of any differences between the costs incurred per books and amounts claimed for reimbursement. A memorandum record reconciling the total indirect cost(s) claimed should also be maintained.

SUPPORTING SCHEDULES FOR COST REIMBURSEMENT CONTRACTS

The following backup information is required as an attachment to the invoice as shown by category of cost:

Direct Labor - identify the number of hours (by contractor labor category and total) and the total loaded direct labor hours billed for the period in the invoice.

Indirect Cost Rates - identify by cost center, the indirect cost rate, the period, and the cost base to which it is applied.

Subcontracts - identify the major cost elements for each subcontract.

Other Direct Costs - when the cost for an individual cost (e.g., photocopying, material and supplies, telephone usage) exceeds \$1,000 per the invoice period, provide a detailed explanation for that cost category.

Contractor Acquired Equipment (if authorized by the contract) - identify by item the quantities, unit prices, and total dollars billed.

Contractor Acquired Software (if authorized by the contract) - identify by item the quantities, unit prices, and total dollars billed.

Travel - when travel costs exceed \$2,000 per invoice period, identify by trip, the number of travelers, the duration of travel, the point of origin, destination, purpose of trip, transportation by unit price, per diem rates on daily basis and total dollars billed. Detailed reporting is not required for local travel.

The manner of breakdown, e.g., work assignment/delivery order basis with/without separate program management, contract period will be specified in the contract instructions.

NOTE: Any costs requiring advance consent by the Contracting Officer will be considered improper and will be suspended, if claimed prior to receipt of Contracting Officer consent. Include the total cost claimed for the current and cumulative-to-date periods. After the total amount claimed, provide summary dollar amounts of cumulative costs: (1) suspended as of the date of the invoice; and (2) disallowed on the contract as of the date of the invoice. The amount under (2) shall include costs originally suspended and later disallowed. Also include an explanation of the changes in cumulative costs suspended or disallowed by addressing each adjustment in terms of: voucher number, date, dollar amount, source, and reason for the adjustment. Disallowed costs should be identified in unallowable accounts in the contractor's accounting system.

SUPPORTING SCHEDULES FOR FIXED-RATE CONTRACTS

The following backup information is required as an attachment to the invoice as shown by category of cost:

Direct Labor - identify the number of hours (by contractor labor category and total) and the total direct labor hours

billed for the period of the invoice.

Subcontracts - identify the major cost elements for each subcontract.

Other Direct Costs - when the cost for an individual cost (e.g., photocopying, material and supplies, telephone usage) exceeds \$1,000 per the invoice period, provide a detailed explanation for that cost category

Indirect Cost Rates - identify by cost center, the indirect cost rate, the period, and the cost base to which it is applied.

Contractor Acquired Equipment - identify by item the quantities, unit prices, and total dollars billed.

Contractor Acquired Software - identify by item the quantities, unit prices, and total dollars billed.

Travel - when travel costs exceed \$2,000 per invoice period, identify by trip, the number of travelers, the duration of travel, the point of origin, destination, purpose of trip, transportation by unit price, per diem rates on daily basis and total dollars billed. Detailed reporting is not required for local travel.

The manner of breakdown, e.g., work assignment/delivery order basis with/without separate program management, contract period will be specified in the contract instructions.

NOTE: Any costs requiring advance consent by the Contracting Officer will be considered improper and will be suspended, if claimed prior to receipt of Contracting Officer consent. Include the total cost claimed for the current and cumulative-to-date periods. After the total amount claimed, provide summary dollar amounts of cumulative costs: (1) suspended as of the date of the invoice; and (2) disallowed on the contract as of the date of the invoice. The amount under (2) shall include costs originally suspended and later disallowed. Also include an explanation of the changes in cumulative costs suspended or disallowed by addressing each adjustment in terms of: voucher number, date, dollar amount, source, and reason for the adjustment. Disallowed costs should be identified in unallowable accounts in the contractor's accounting system.

RESUBMISSIONS

When an original voucher was submitted, but not paid in full because of suspended costs and after receipt of a letter of removal of suspension, resubmissions of any previously claimed amounts which were suspended should be submitted in a separate invoice showing the original voucher number and designated with the letter "R" with the copy of the removal of suspension notice. The amounts should be shown under the appropriate cost category and include all appropriate supplemental schedules. NOTE: All disallowances must be identified as such in the accounting system through journal entries.

Voucher re-submittals may also occur as a result of: (1) a new indirect cost rate agreement; or (2) adjustments to previously billed direct cost rates due to audit resolution. Such claims should be submitted in a separate invoice or request for contractor financing payment number. They should include supplemental schedules showing the previously adjusted amounts by contract period. If the resubmission is based on a new rate agreement, a copy of the agreement should be attached. Costs must be identified by delivery order or work assignment where appropriate. If the contract is Superfund-related, voucher re-submittals shall also identify the amount claimed against each Superfund site and non-site-specific activity.

COMPLETION VOUCHERS

Submit a completion voucher when all performance provisions of the contract are physically complete, when the final report (if required) is accepted, and when all direct costs have been incurred and booked. Indirect costs may be claimed at the provisional rates, if final rates are not yet available. Contractors must identify these vouchers by typing "Completion Voucher" next to the voucher number. For contracts separately invoiced by delivery order, provide a schedule showing total costs claimed by delivery order and in total for the contract.

In addition to the completion voucher, the contractor must submit an original and two copies of EPA Form 1900-10, Contractor's Cumulative Claim and Reconciliation showing the total cumulative costs claimed under the contract.

The information which a contractor is required to submit in its EPA Form 1900-10 is set forth as follows:

- (1) Contractor's Name and Address - show the name of the contractor exactly as it appears in the contract and its correct address, except when an assignment has been made by the contractor, or the right to receive payment has been restricted, as in the case of an advance account. When the right to receive payment is restricted, the type of information to be shown in this space shall be furnished by the Contracting Officer.
- (2) Contract Number - insert the number of the contract under which reimbursement is claimed.
- (3) First voucher number and completion voucher number.
- (4) Total amount of cost claimed for each cost element category through the completion voucher.
- (5) Total Fee awarded.
- (6) Amount of indirect costs calculated using negotiated final indirect cost rate(s) and/or provisional rate(s) as specified in the contract, if final rate(s) are not yet negotiated for any fiscal period.
- (7) Fiscal year.
- (8) Indirect cost center.
- (9) Appropriate basis for allocation.
- (10) Negotiated final indirect cost rate(s) or provisional indirect cost rate(s).
- (11) Signature.
- (12) Official title.
- (13) Date.

FINAL VOUCHER AND CLOSING DOCUMENTS

After completion of the final audit and all suspensions and/or audit exceptions have been resolved as to the final allowable costs and fee, including establishment of final indirect cost rate(s) for all periods the contractor shall prepare a final voucher including any adjustments to vouchered costs necessitated by the final settlement of the contract price. Contractors must identify these vouchers by typing "Final Voucher" next to the voucher number. For contracts separately invoiced by delivery order, provide a schedule showing final total costs claimed by delivery order and in total for the contract. The contractor shall also provide an original and two copies of an updated EPA Form 1900-10, Contractors Cumulative Claim and Reconciliation, showing the total negotiated, cumulative costs for the contract. Indirect costs shall be included at the final negotiated rates.

In addition to the final voucher, the contractor must submit an original and two copies of the Contractor's Release; Assignee's Release, if applicable; the Contractor's Assignment of Refunds, Rebates, Credits and other Amounts; the Assignee's Assignment of Refunds, Rebates, Credits and other Amounts, if applicable; and the Contractor's Affidavit

of Waiver of Lien, when required by the contract.

G.3 1552.242-70 INDIRECT COSTS (APR 1984) (DEVIATION)

(a) In accordance with paragraph (d) of the "Allowable Cost and Payment" clause, the final indirect cost rates applicable to this contract shall be established between the Contractor and the appropriate Government representative (EPA, other Government agency, or auditor), as provided by FAR 42.703-1(a). EPA's procedures require a Contracting Officer determination of indirect cost rates for its contracts. In those cases where EPA is the cognizant agency (see FAR 42.705-1), the final rate proposal shall be submitted to the cognizant audit activity and to the following:

Environmental Protection Agency
Chief, Cost and Rate Negotiation Service Center
Office of Acquisition Management (3802R)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D. C. 20460

The Contractor shall also follow the notification and cost impact procedures prescribed in paragraph (b) below.

Where EPA is not the cognizant agency, the final rate proposal shall be submitted to the above-cited address, to the cognizant audit agency, and to the designated Contracting Officer of the cognizant agency. Upon establishment of the final indirect cost rates, the Contractor shall submit an executed Certificate of Current Cost or Pricing Data (see FAR 15.406-2) applicable to the data furnished in connection with the final rates to the cognizant audit agency. The final rates shall be contained in a written understanding between the Contractor and the appropriate Government representative. Pursuant to the "Allowable Cost and Payment" clause, the allowable indirect costs under this contract shall be obtained by applying the final agreed upon rate(s) to the appropriate bases.

(b) Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the appropriate Government representative in accordance with FAR 42.704, by means of a separate indirect cost rate agreement or a contract modification subject to adjustment when the final rates are established. The established billing rates are currently as follows:

(b)(4)



These billing rates may be prospectively or retroactively revised by mutual agreement, at the request of either the Government or the Contractor, to prevent substantial overpayment or underpayment.

(1) For any retroactive indirect cost rate adjustments (i.e., indirect costs already billed), including final indirect cost rate adjustments, the Contractor shall provide to the Cost Policy and Rate Negotiation Section, with copies to the

current EPA Contracting Officers of active contracts, a cost impact statement showing the effect of the indirect cost rate changes for each contract. This statement shall compare the cost billed to the cost the Contractor proposes to bill.

(2) For prospective indirect cost rate adjustments only, the Contractor shall notify the current EPA Contracting Officers of the new proposed rates when it proposes rates to the Cost Policy and Rate Negotiation Section.

(3) For either prospective or retroactive indirect cost rate adjustments, the Contractor shall provide the Cost Policy and Rate Negotiation Section with the names of the current EPA Contracting Officers for the affected contracts.

(c) Notwithstanding the provisions of paragraphs (a) and (b) above, ceilings are hereby established on indirect costs reimbursable under this contract. The Government shall not be obligated to pay the Contractor any additional amount on account of indirect costs in excess of the ceiling rates listed below:

None

The ceiling rates specified above are applicable from the effective date of the contract through the end of the period of performance including any option periods.

G.4 1552.245-70 GOVERNMENT PROPERTY. (SEP 2009)

(a) The contractor shall not fabricate or acquire, on behalf of the Government, either directly or indirectly through a subcontract, any item of property without prior written approval from the Contracting Officer. If the Contracting Officer authorizes the contractor to acquire and/or fabricate equipment for use in the performance of this contract, the equipment shall be subject to the provisions of the "Government Property" clause and listed on the contract via contract modification.

(b) If the Government provides item(s) of Government property to the contractor for use in the performance of this contract, this property shall be used and maintained by the contractor in accordance with the provisions of the "Government Property" clause.

The "EPA Contract Property Administration Requirements" provided below apply to this contract.

U.S. Environmental Protection Agency

Contract Property Administration Requirements

1. Purpose. This document sets forth the requirements for the U.S. Environmental Protection Agency (EPA) contractors performing Government property management responsibilities under EPA contracts. These requirements supplement those contained in the Government Property clause(s) and Part 45 Government Property of the Federal Acquisition Regulation (FAR).

2. Contract Property Administration (CPAR)

a. EPA Delegation. EPA delegates all contract property administration to the EPA Contract Property Coordinator (CPC). The delegations apply to all EPA contracts issued with or that have the potential to receive, purchase or acquire Government Property or include the Government Property clauses. In addition to administering all contract property, the CPC provides technical expertise and assistance to the Contracting Officer (CO) and Contracting Officer Technical Representative (COTR) relative to Government Property.

b. DCMA Re-delegation. The CPC may request support for contract property management oversight, including

property administration and plant clearance, from the Defense Contract Management Agency (DCMA). If DCMA agrees to provide support, DCMA will notify the contractor of the assigned property administrator (PA) and plant clearance officer (PLCO). The DCMA PA is available to the contractor for assistance in all matters of property administration. Notwithstanding the delegation, as necessary, the contractor may contact the EPA CO. In the event of a disagreement between the contractor and the DCMA PA, the contractor should seek resolution from the CO. Unless, otherwise directed in the contract, or this document, all originals of written information or reports, except direct correspondence between the contractor and the DCMA PA, relative to Government property, should be forwarded to the administrative CO assigned to this contract and the CPC.

c. Disagreements. Notwithstanding the delegation(s), as necessary, the contractor may contact the CO. In the event of a disagreement between the contractor and the PA or the CPC the contractor should seek resolution from the CO.

3. Requests for Government Property.

In accordance with FAR 45.102, the contractor shall furnish all property required for performing Government contracts. If a contractor believes that Government property is required for performance of the contract, the contractor shall submit a written request to the CO. At a minimum, the request shall contain the following elements:

- a. Contract number for which the property is required.
- b. An item(s) description, quantity and estimated cost.
- c. Certification that no like contractor property exists which could be utilized.
- d. A detailed description of the task-related purpose of the property.
- e. Explanation of negative impact if property is not provided by the Government.

f. Lease versus purchase analysis shall be furnished with the request to acquire property on behalf of the Government, with the exception of requests for material purchases. The contractor may not proceed with acquisition of property on behalf of the Government until receipt of written authorization from the Contracting Officer.

4. Transfer of Government Property. The Contracting Officer initiates the transfer of the government property via a contract modification. The transferor (EPA or another contractor) shall provide to the transferee, the receiving contractor, the information needed to establish and maintain the property records required of FAR 52.245-1, as well as all of the applicable data elements required by Attachment 1 of this clause. The transferee, the receiving contractor, should perform a complete inventory of the property before signing the acceptance document for the property. Accountability will transfer to the receiving contractor upon receipt and acceptance of the property, in accordance with FAR 45.106.

5. Records of Government Property.

a. In accordance with FAR 52.245-1, the contractor shall create and maintain records of all Government property, regardless of value, including property provided to and in the possession of a subcontractor. Material provided by the Government or acquired by the contractor and billed as a direct charge to the contract is Government property and records must be established as such.

b. The Contractor shall identify all Superfund property and designate it as such both on the item and on the Government property record. If it is not practicable to tag the item, the contractor shall write the ID number on a tag, card or other entity that may be kept with the item or in a file.

c. Support documentation used for posting entries to the property record shall provide complete, current and

auditable data. Entries shall be posted to the record in a timely manner following an action.

d. For Government vehicles, in addition to the data elements required by EPA, the contractor shall also comply with the General Services Administration (GSA) and Department of Energy (DOE) record and report requirements supplied with all EPA provided motor vehicles. If the above requirements were not provided with the vehicle, the contractor shall notify the designated CPC and the Fleet Manager.

e. When Government property is disclosed to be in the management and/or control of the contractor but not provided under any contract, the contractor shall record and report the property in accordance with FAR 52.245-1.

6. Inventories of Government Property. The contractor shall conduct a complete physical inventory of EPA property at least once per year. The contractor shall report the results of the inventory, including any discrepancies, to the CO. Reconciliation of discrepancies shall be completed in accordance with the schedule negotiated with the CO. See section 10 herein, Contract Closeout, for information on final inventories.

7. Reports of Government Property. EPA requires an annual summary report, for each contract, by contract number, of Government property in the contractor's possession. The annual summary is due as of September 30th of each year, and upon contract termination or expiration.

a. For each classification listed on the EPA Property Report form, with the exception of material, the contractor shall provide the total acquisition cost and total quantity. If there are zero items in a classification, or if there is an ending balance of zero, the classification must be listed with zeros in the quantity and acquisition cost columns.

b. For material, the contractor shall provide the total acquisition cost only.

c. Property classified as Plant Equipment, Superfund and Special Test Equipment must be reported on two separate lines. The first line shall include the total acquisition cost and quantity of all items or systems with a unit acquisition cost of \$25,000 or more. The second line shall include the total acquisition cost and quantity of all items with a unit acquisition cost of less than \$25,000.

d. For items comprising a system, which is defined as "a group of interacting items functioning as a complex whole," the contractor may maintain the record as a system noting all components of the system under the main component or maintain individual records for each item. However, for the annual report of Government property the components must be reported as a system with one total dollar amount for the system, if that system total is \$25,000 or more.

e. The reports are to be received at EPA by the CPC by October 5th of each year.

f. Distribution shall be as follows:

Original to: CPC

One copy: CO

g. Contractors are required to comply with GSA and DOE special reporting requirements for motor vehicles. A statement of these requirements will be provided by the EPA Facility Management and Services Division (FMSD) concurrent with receipt of each vehicle.

h. The contractor shall provide detailed reports on an as-needed basis, as may be requested by the CO or the CPC.

8. Disposition of Government Property. The disposition process is composed of three distinct phases: identification, reporting, and final disposition.

a. Identification. The disposition process begins with the contractor identifying Government property that is no

longer required for contract performance. Effective contract property management systems provide for identification of excess as it occurs. Once Government property has been determined to be excess to the accountable contract, it must be screened against the contractor's other EPA contracts for further use. If the property may be reutilized, the contractor shall notify the CO in writing. Government property will be transferred via contract modifications to other contracts only when the COs on both the current contract and the receiving contract authorize the transfer.

b. Reporting.

(i) EPA. Government property shall be reported in accordance with FAR 52.245-1. The Standard Form, SF 1428, Inventory Disposal Schedule, provides the format for reporting excess Government property. Instructions for completing and when to use the form may be found at FAR 52.245-1(j). Forward the completed SF 1428 to the CPC. The SF 1428 is available at <http://www.arnet.gov/far/current/html/FormsStandard54.html>. Superfund property must contain a Superfund notification and the following language must be displayed on the form: "Note to CO: Reimbursement to the EPA Superfund is required."

(ii) DCMA. If the EPA contract has been re-delegated to DCMA, the excess items will be entered into the Plant Clearance Automated Reutilization Screening System (PCARSS). Access and information pertaining to this system may be addressed to the DCMA Plant Clearance Officer (PLCO).

c. Disposition Instructions.

(i) Retention. When Government property is identified as excess, the CO may direct the contractor in writing to retain all or part of the excess Government Property under the current contract for possible future requirements.

(ii) Return to EPA. When Government property is identified as excess, the CO may direct the contractor in writing to return those items to EPA inventory. The contractor shall ship/deliver the property in accordance with the instructions provided by the CO.

(iii) Transfer. When Government property is identified as excess, the CO may direct the contractor in writing to transfer the property to another EPA contractor. The contractor shall transfer the property by shipping it in accordance with the instructions provided by the CO. To effect transfer of accountability, the contractor shall provide the recipient of the property with the applicable data elements set forth in Attachment 1 of this clause.

(iv) Sale. If GSA or the DCMA PLCO conducts a sale of the excess Government property, the contractor shall allow prospective bidders access to property offered for sale.

(v) Abandonment. Abandoned property must be disposed of in a manner that does not endanger the health and safety of the public. If the contract is delegated to DCMA and the contractor has input EPA property into the PCARSS system, the EPA Property Utilization Officer (PUO) shall notify the CO. The CO shall notify the contractor in writing of those items EPA would like to retain, have returned or transferred to another EPA contractor. The contractor shall notify the DCMA PLCO and request withdrawal of those items from the inventory schedule. The contractor shall update the Government property record to indicate the disposition of the item and to close the record. The contractor shall also obtain either a signed receipt or proof of shipment from the recipient. The contractor shall notify the CO when all actions pertaining to disposition have been completed. The contractor shall complete an EPA Property report with changes, to include supporting documentation of completed disposition actions and submit it to the CPC.

9. Decontamination. In addition to the requirements of the "Government Property" clause and prior to performing disposition of any EPA Government Property, the contractor shall certify in writing that the property is free from contamination by any hazardous or toxic substances.

10. Contract Closeout. The contractor shall complete a physical inventory of all Government property at contract completion and the results, including any discrepancies, shall be reported to the CO. If the contract is delegated to DCMA, the physical inventory report will be submitted to the EPA CO and a copy submitted to the DCMA PA. In the

case of a terminated contract, the contractor shall comply with the inventory requirements set forth in the applicable termination clause. The results of the inventory, as well as a detailed inventory listing, must be forwarded to the CO and if delegated, a copy to the DCMA PA. In order to expedite the disposal process, contractors may be required to, or may elect to submit to the CPC, an inventory schedule for disposal purposes up to six (6) months prior to contract completion. If such an inventory schedule is prepared, the contractor must indicate the earliest date that each item may be disposed. The contractor shall update all property records to show disposal action. The contractor shall notify the CO, and, if delegated, the DCMA PA, in writing, when all work has been completed under the contract and all Government property accountable to the contract has been disposed. The contractor shall complete a FINAL EPA Property report with all supporting documentation to the CPC.

Attachment 1

Required Data Element--In addition to the requirements of FAR 52.245-1(f)(vi), Reports of Government Property, the contractor is required to maintain, and report the following data elements for EPA Government property (all elements are not applicable to material):

Name and address of the administrative Contracting Officer; Name of the contractor representative; Business type; Name and address of the contract property coordinator; Superfund (Yes/No); No. of Subcontractor/Alternate Locations.

Note: For items comprising a system which is defined as, "a group of interacting items functioning as a complex whole," the contractor may maintain the record as a system noting all components of the system under the main component or maintain individual records for each item. However, for the Annual Report of Government Property, the components must be reported as a system with one total dollar amount for the system, if that system total is \$25,000 or more.

G.5 1552.245-71 GOVERNMENT-FURNISHED DATA. (SEP 2009)

(a) The Government shall deliver to the Contractor the Government-furnished data described in the contract. If the data, suitable for its intended use, is not delivered to the Contractor, the Contracting Officer shall equitably adjust affected provisions of this contract in accordance with the "Changes" clause when:

- (1) The Contractor submits a timely written request for an equitable adjustment; and
- (2) The facts warrant an equitable adjustment.

(b) Title to Government-furnished data shall remain in the Government.

(c) The Contractor shall use the Government-furnished data only in connection with this contract.

(d) The following data will be furnished to the Contractor on or about the time indicated:

AS SPECIFIED IN INDIVIDUAL WORK ASSIGNMENTS DURING CONTRACT PERFORMANCE

G.6 LOCAL CLAUSE EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Contract-Level Contracting Officers Representatives (CORs) for this contract are as follows:

Contract Level COR (CL-COR)

MELISSA D. REVELY-WILSON

1200 PENNSYLVANIA AVE, NW
Mail Code 86801P
WASHINGTON, DC 20460
Phone Number: (703)347-8523
Fax Number: (703)347-8696
E-Mail Address: revely-wilson.melissa@epa.gov
Alternate CL-COR

SHARON BOYD
1200 PENNSYLVANIA AVE, NW
Mail Code 86801P
WASHINGTON, DC 20460
Phone Number: (703)347-8576
Fax Number: (703)347-8696
E-Mail Address: boyd-sharon@epa.gov

Contracting Officials responsible for administering this contract are as follows:

Administrative Contracting Officer:

Matthew Growney
26 W MARTIN LUTHER KING DRIVE
Mail Code NWD1
CINCINNATI, OH 45268
E-Mail Address: Growney.matthew@epa.gov
Phone: 513 487 2029
Fax: 513 487 2109

Contract Specialist
Adam Meier
26 W MARTIN LUTHER KING DRIVE
Mail Code NWD1
CINCINNATI, OH 45268
E-Mail Address: meier.adam@epa.gov
Phone: 513 487 2852
Fax: 513 487 2109

G.7 LOCAL CLAUSE EPA-G-45-101 DESIGNATION OF PROPERTY ADMINISTRATOR

The property administrator for this contract is as follows:

US EPA, Property Administration Office
1300 Pennsylvania Ave. N.W., Rm # 61289
Mail Code 3802R
Washington, DC 20004

The property administrator is the Contracting Officer's designated representative on property matters. The Contractor shall furnish all required information on property to the property administrator.

SECTION H -SPECIAL CONTRACT REQUIREMENTS

H.1 1552.203-71 DISPLAY OF EPA OFFICE OF INSPECTOR GENERAL HOTLINE POSTER. (AUG 2000)

(a) For EPA contracts valued at \$1,000,000 or more including all contract options, the contractor shall prominently display EPA Office of Inspector General Hotline posters in contractor facilities where the work is performed under the contract.

(b) Office of Inspector General hotline posters may be obtained from the EPA Office of Inspector General, ATTN: OIG Hotline (2443), 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or by calling (202) 260-5113.

(c) The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and provided instructions that encourage employees to make such reports.

H.2 1552.208-70 PRINTING. (DEC 2005)

(a) Definitions.

"Printing" is the process of composition, plate making, presswork, binding and microform; or the end items produced by such processes and equipment. Printing services include newsletter production and periodicals which are prohibited under EPA contracts.

"Composition" applies to the setting of type by hot-metal casting, photo typesetting, or electronic character generating devices for the purpose of producing camera copy, negatives, a plate or image to be used in the production of printing or microform.

"Camera copy" (or "camera-ready copy") is a final document suitable for printing/duplication.

"Desktop Publishing" is a method of composition using computers with the final output or generation of camera copy done by a color inkjet or color laser printer. This is not considered "printing." However, if the output from desktop publishing is being sent to a typesetting device (i.e., Linotronic) with camera copy being produced in either paper or negative format, these services are considered "printing".

"Microform" is any product produced in a miniaturized image format, for mass or general distribution and as a substitute for conventionally printed material. Microform services are classified as printing services and includes microfiche and microfilm. The contractor may make up to two sets of microform files for archival purposes at the end of the contract period of performance.

"Duplication" means the making of copies on photocopy machines employing electrostatic, thermal, or other processes without using an intermediary such as a negative or plate.

"Requirement" means an individual photocopying task. (There may be multiple requirements under a Work Assignment or Delivery Order. Each requirement would be subject to the photocopying limitation of 5,000 copies of one page or 25,000 copies of multiple pages in the aggregate per requirement).

"Incidental" means a draft and/or proofed document (not a final document) that is not prohibited from printing under EPA contracts.

(b) Prohibition. (1) The contractor shall not engage in, nor subcontract for, any printing in connection with the

performance of work under this contract. Duplication of more than 5,000 copies of one page or more than 25,000 copies of multiple pages in the aggregate per requirement constitutes printing. The intent of the printing limitation is to eliminate duplication of final documents.

(2) In compliance with EPA Order 2200.4a, EPA Publication Review Procedure, the Office of Communications, Education, and Media Relations is responsible for the review of materials generated under a contract published or issued by the Agency under a contract intended for release to the public.

(c) Affirmative Requirements. (1) Unless otherwise directed by the contracting officer, the contractor shall use double-sided copying to produce any progress report, draft report or final report.

(2) Unless otherwise directed by the contracting officer, the contractor shall use recycled paper for reports delivered to the Agency which meet the minimum content standards for paper and paper products as set forth in EPA's Web site for the Comprehensive Procurement Guidelines at: <http://www.epa.gov/cpg/>.

(d) Permitted Contractor Activities. (1) The prohibitions contained in paragraph (b) do not preclude writing, editing, or preparing manuscript copy, or preparing related illustrative material to a final document (camera-ready copy) using desktop publishing.

(2) The contractor may perform a requirement involving the duplication of less than 5,000 copies of only one page, or less than 25,000 copies of multiple pages in the aggregate, using one color (black), such pages shall not exceed the maximum image size of 103/4by 141/4inches, or 11 by 17 paper stock. Duplication services below these thresholds are not considered printing. If performance of the contract will require duplication in excess of these thresholds, contractors must immediately notify the contracting officer in writing. The contracting officer must obtain a waiver from the U.S. Congress Joint Committee on Printing if it is deemed appropriate to exceed the duplication thresholds. Duplication services of "incidentals" in excess of the thresholds, are allowable.

(3) The contractor may perform a requirement involving the multi-color duplication of no more than 100 pages in the aggregate using color copier technology, such pages shall not exceed the maximum image size of 103/4by 141/4inches, or 11 by 17 paper stock. Duplication services below these thresholds are not considered printing. If performance of the contract will require duplication in excess of these limits, contractors must immediately notify the contracting officer in writing. The contracting officer must obtain a waiver from the U.S. Congress Joint Committee on Printing.

(4) The contractor may perform the duplication of no more than a total of 100 diskettes or CD-ROM's. Duplication services below these thresholds are not considered printing. If performance of the contract will require duplication in excess of these thresholds, contractors must immediately notify the contracting officer in writing. The contracting officer must obtain a waiver from the U.S. Congress Joint Committee on Printing.

(e) Violations. The contractor may not engage in, nor subcontract for, any printing in connection with the performance of work under the contract. The cost of any printing services in violation of this clause will be disallowed, or not accepted by the Government.

(f) Flowdown Provision. The contractor shall include in each subcontract which may involve a requirement for any printing/duplicating/copying a provision substantially the same as this clause.

H.3 1552.209-71 ORGANIZATIONAL CONFLICTS OF INTEREST. (MAY 1994) -- ALTERNATE I (MAY 1994)

(a) The Contractor warrants that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR subpart 9.5, or that the Contractor has disclosed all such relevant information.

(b) Prior to commencement of any work, the Contractor agrees to notify the Contracting Officer immediately that, to the best of its knowledge and belief, no actual or potential conflict of interest exists or to identify to the Contracting Officer any actual or potential conflict of interest the firm may have. In emergency situations, however, work may begin but notification shall be made within five (5) working days.

(c) The Contractor agrees that if an actual or potential organizational conflict of interest is identified during performance, the Contractor will immediately make a full disclosure in writing to the Contracting Officer. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Contracting Officer, to avoid, mitigate, or neutralize the actual or potential conflict of interest. The Contractor shall continue performance until notified by the Contracting Officer of any contrary action to be taken.

(d) Remedies-The EPA may terminate this contract for convenience, in whole or in part, if it deems such termination necessary to avoid an organizational conflict of interest. If the Contractor was aware of a potential organizational conflict of interest prior to award or discovered an actual or potential conflict after award and did not disclose it or misrepresented relevant information to the Contracting officer, the Government may terminate the contract for default, debar the Contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.

(e) The Contractor agrees to insert in each subcontract or consultant agreement placed hereunder provisions which shall conform substantially to the language of this clause, including this paragraph, unless otherwise authorized by the contracting officer.

H.4 1552.209-73 NOTIFICATION OF CONFLICTS OF INTEREST REGARDING PERSONNEL. (MAY 1994) ALTERNATE I (JUN 1994) DEVIATION

(a) In addition to the requirements of the contract clause entitled "Organizational Conflicts of Interest," the following provisions with regard to employee personnel performing under this contract shall apply until the earlier of the following two dates: the termination date of the affected employee(s) or the expiration date of the contract.

(b) The Contractor agrees to notify immediately the EPA Project Officer and the Contracting Officer of (1) any actual or potential personal conflict of interest with regard to any of its employees working on or having access to information regarding this contract, or (2) any such conflicts concerning subcontractor employees or consultants working on or having access to information regarding this contract, when such conflicts have been reported to the Contractor. A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work.

(c) The Contractor agrees to notify each Project Officer and Contracting Officer prior to incurring costs for that employee's work when an employee may have a personal conflict of interest. In the event that the personal conflict of interest does not become known until after performance on the contract begins, the Contractor shall immediately notify the Contracting Officer of the personal conflict of interest. The Contractor shall continue performance of this contract until notified by the Contracting Officer of the appropriate action to be taken.

(d) The Contractor agrees to insert in any subcontract or consultant agreement placed hereunder, except for subcontracts or consultant agreements for well drilling, fence erecting, plumbing, utility hookups, security guard services, or electrical services, provisions which shall conform substantially to the language of this clause, including this paragraph (d), unless otherwise authorized by the Contracting Officer.

H.5 1552.209-74 LIMITATION OF FUTURE CONTRACTING. (APR 2004) ALTERNATE V (HEADQUARTERS SUPPORT) (APR 2004)

(a) The parties to this contract agree that the Contractor will be restricted in its future contracting in the manner described below. Except as specifically provided in this clause, the Contractor shall be free to compete for contracts on an equal basis with other companies.

(b) If the Contractor, under the terms of this contract, or through the performance of work pursuant to this contract, is required to develop specifications or statements of work and such specifications or statements of work are incorporated into an EPA solicitation, the Contractor shall be ineligible to perform the work described in that solicitation as a prime Contractor or subcontractor under an ensuing EPA contract.

(C) The contractor, during the life of the contract, will be ineligible to enter into a business or financial relationship with other non-governmental entities to perform human health risk assessment methods and guidelines that are the same as or similar to those that have been issued through Work Assignments under this contract. Additionally, the contractor during the life of the contract, and for a period of three years from its completion agrees not to enter into contracts with entities who could be impacted (either positively or negatively) from the content of regulations or policies that result from work that the contractor (or its subcontractors) have performed under this contract, without prior written authorization from the Contracting Officer.

(d) The Contractor agrees in advance that if any bids/proposals are submitted for any work that would require written approval of the Contracting Officer prior to entering into a contract subject to the restrictions of this clause, then the bids/proposals are submitted at the Contractor's own risk. Therefore, no claim shall be made against the Government to recover bid/proposal costs as a direct cost whether the request for authorization to enter into the contract is denied or approved.

(e) To the extent that the work under this contract requires access to proprietary or confidential business or financial data of other companies, and as long as such data remains proprietary or confidential, the Contractor shall protect such data from unauthorized use and disclosure.

(f) The Contractor agrees to insert in each subcontract or consultant agreement placed hereunder, except for subcontracts or consultant agreements for nondiscretionary technical or engineering services, including treatability studies, well drilling, fence erecting, plumbing, utility hookups, security guard services, or electrical services, provisions which shall conform substantially to the language of this clause, including this paragraph (f) unless otherwise authorized by the Contracting Officer. The Contractor may request in writing that the Contracting Officer exempt from this clause a particular subcontract or consultant agreement for nondiscretionary technical or engineering services not specifically listed above, including laboratory analysis. The Contracting Officer will review and evaluate each request on a case-by-case basis before approving or disapproving the request.

(g) If the Contractor seeks an expedited decision regarding its initial future contracting request, the Contractor may submit its request to both the Contracting Officer and the next administrative level within the Contracting Officer's organization.

(h) A review process available to the Contractor when an adverse determination is received shall consist of a request for reconsideration to the Contracting Officer or a request for review submitted to the next administrative level within the Contracting Officer's organization. An adverse determination resulting from a request for reconsideration by the Contracting Officer will not preclude the Contractor from requesting a review by the next administrative level. Either a request for review or a request for reconsideration must be submitted to the appropriate level within 30 calendar days after receipt of the initial adverse determination.

H.6 1552.217-71 OPTION TO EXTEND THE TERM OF THE CONTRACT-COST-TYPE CONTRACT. (APR 1984)

The Government has the option to extend the term of this contract for four (4) additional period(s). If more than 60 days remain in the contract period of performance, the Government, without prior written notification, may exercise

this option by issuing a contract modification. To exercise this option within the last 60 days of the period of performance, the Government must provide to the Contractor written notification prior to that last 60-day period. This preliminary notification does not commit the Government to exercising the option. The Government's estimated level of effort is 30,000 direct labor hours for each additional option period

Use of an option will result in the following contract modifications:

(a) The "Period of Performance" clause will be amended to cover a base period and option periods:

Period	Start Date	End Date
Base Period	Effective Date of award	10/31/14
Option Period I	11/1/14	10/31/15
Option Period II	11/1/15	10/31/16
Option Period III	11/1/16	10/31/17
Option Period IV	11/1/17	10/31/18

(b) Paragraph (a) of the "Level of Effort" clause will be amended to reflect a new and separate level of effort of:

Period	Level of Effort (Direct Labor Hours)
Option Period I	30,000
Option Period II	30,000
Option Period III	30,000
Option Period IV	30,000

(c) The "Estimated Cost and Fixed Fee" clause will be amended to reflect increased estimated costs and fixed fee for each option period as follows:

Period	Estimated Cost	Fixed Fee	Total CPFF
Option Period I	\$(b)(4)	\$(b)(4)	\$2,614,952
Option Period II	\$	\$	\$2,673,042
Option Period III	\$	\$	\$2,732,592
Option Period IV	\$	\$	\$2,774,254

(d) If the contract contains "not to exceed amounts" for elements of other direct costs (ODC), those amounts will be increased as follows:

None

H.7 1552.217-73 OPTION FOR INCREASED QUANTITY-COST-TYPE CONTRACT. (JUN 1997)

(a) By issuing a contract modification, during each period, the Government may increase the estimated total level of effort by:

Period	Level of Effort (Direct Labor Hours)
Base Period	46,380
Option Period I	46,380
Option Period II	46,380
Option Period III	46,380
Option Period IV	46,380

The Government may issue a maximum of 20 orders to increase the level of effort in blocks of 2319 hours during any given period. The estimated cost and fixed fee of each block of hours is as follows:

Period	Estimated Cost	Fixed Fee	Total CPFF
Base Period	\$(b)(4)	\$(b)(4)	\$197,736
Option Period I	\$	\$	\$202,134
Option Period II	\$	\$	\$206,623
Option Period III	\$	\$	\$211,228
Option Period IV	\$	\$	\$214,447

(b) When these options are exercised, paragraph (a) of the "Level of Effort" clause and the "Estimated Cost and Fixed Fee" clause will be modified accordingly.

(c) If this contract contains "not to exceed amounts" for elements of other direct costs (ODCs), those amounts will be increased as follows:

None

H.8 1552.219-73 SMALL DISADVANTAGED BUSINESS TARGETS. (OCT 2000)

(a) In accordance with FAR 19.1202-4(a) and EPAAR 1552.219-72, the following small disadvantaged business (SDB) participation targets proposed by the contractor are hereby incorporated into and made part of the contract:

Contractor targets	NAICS industry subsector(s)	Dollars	Percentage of total contract value
Total Prime Contractor Targets (including joint venture partners and team members)	N/A	N/A	N/A
Total Subcontractor Targets	541990	\$(b)(4)	(b)(4)
Total Prime Contractor Targets (including joint venture partners and team members)			
Total Subcontractor Targets	N/A	N/A	N/A

(b) The following specifically identified SDB(s) was (were) considered under the Section MSDB participation evaluation factor or subfactor (continue on separate sheet if more space is needed):

- (1) (b)(4)
- (2)

The contractor shall promptly notify the contracting officer of any substitution of firms if the new firms are not SDB

concerns.

(c) In accordance with FAR 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting, the contractor shall report on the participation of SDB concerns in the performance of the contract no less than thirty (30) calendar days prior to each annual contractor performance evaluation or as otherwise directed by the contracting officer.

H.9 1552.223-70 PROTECTION OF HUMAN SUBJECTS (APR 1984)

(a) The Contractor shall protect the rights and welfare of human subjects in accordance with the procedures specified in its current Institutional Assurance on file with the Agency. The Contractor shall certify at least annually that an appropriate institutional committee has reviewed and approved the procedures which involve human subjects in accordance with the applicable Institutional Assurance accepted by the Agency.

(b) The Contractor shall bear full responsibility for the proper and safe performance of all work and services involving the use of human subjects under this contract.

H.10 1552.228-70 INSURANCE-- LIABILITY TO THIRD PERSONS. (OCT 2000)

(a)(1) Except as provided in subparagraph (2) below, the Contractor shall provide and maintain workers' compensation, employer's liability, comprehensive general liability (bodily injury), and comprehensive automobile liability (bodily injury and property damage) insurance, and such other insurance as the Contracting officer may require under this contract.

(2) The Contractor may, with the approval of the Contracting officer, maintain a self-insurance program; provided that, with respect to workers' compensation, the Contractor is qualified pursuant to statutory authority.

(3) All insurance required by this paragraph shall be in a form and amount and for those periods as the Contracting officer may require or approve and with insurers approved by the Contracting officer.

(b) The Contractor agrees to submit for the Contracting officer's approval, to the extent and in the manner required by the Contracting officer, any other insurance that is maintained by the Contractor in connection with the performance of this contract and for which the Contractor seeks reimbursement.

(c) The Contractor shall be reimbursed for that portion of the reasonable cost of insurance allocable to this contract, and required or approved under this clause, in accordance with its established cost accounting practices.

H.11 1552.235-70 SCREENING BUSINESS INFORMATION FOR CLAIMS OF CONFIDENTIALITY. (APR 1984)

(a) Whenever collecting information under this contract, the Contractor agrees to comply with the following requirements:

(1) If the Contractor collects information from public sources, such as books, reports, journals, periodicals, public records, or other sources that are available to the public without restriction, the Contractor shall submit a list of these sources to the appropriate program office at the time the information is initially submitted to EPA. The Contractor

shall identify the information according to source.

(2) If the Contractor collects information from a State or local Government or from a Federal agency, the Contractor shall submit a list of these sources to the appropriate program office at the time the information is initially submitted to EPA. The Contractor shall identify the information according to source.

(3) If the Contractor collects information directly from a business or from a source that represents a business or businesses, such as a trade association:

(i) Before asking for the information, the Contractor shall identify itself, explain that it is performing contractual work for the U.S. Environmental Protection Agency, identify the information that it is seeking to collect, explain what will be done with the information, and give the following notice:

(A) You may, if you desire, assert a business confidentiality claim covering part or all of the information. If you do assert a claim, the information will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 CFR part 2, subpart B.

(B) If no such claim is made at the time this information is received by the Contractor, it may be made available to the public by the Environmental Protection Agency without further notice to you.

(C) The contractor shall, in accordance with FAR part 9, execute a written agreement regarding the limitations of the use of this information and forward a copy of the agreement to the Contracting Officer.

(ii) Upon receiving the information, the Contractor shall make a written notation that the notice set out above was given to the source, by whom, in what form, and on what date.

(iii) At the time the Contractor initially submits the information to the appropriate program office, the Contractor shall submit a list of these sources, identify the information according to source, and indicate whether the source made any confidentiality claim and the nature and extent of the claim.

(b) The Contractor shall keep all information collected from nonpublic sources confidential in accordance with the clause in this contract entitled "Treatment of Confidential Business Information" as if it had been furnished to the Contractor by EPA.

(c) The Contractor agrees to obtain the written consent of the Contracting Officer, after a written determination by the appropriate program office, prior to entering into any subcontract that will require the subcontractor to collect information. The Contractor agrees to include this clause, including this paragraph (c), and the clause entitled "Treatment of Confidential Business Information" in all subcontracts awarded pursuant to this contract that require the subcontractor collect information.

H.12 1552.235-71 TREATMENT OF CONFIDENTIAL BUSINESS INFORMATION. (APR 1984)

(a) The Contracting Officer, after a written determination by the appropriate program office, may disclose confidential business information to the Contractor necessary to carry out the work required under this contract. The Contractor agrees to use the confidential information only under the following conditions:

(1) The Contractor and Contractor's Employees shall: (i) use the confidential information only for the purposes of carrying out the work required by the contract; (ii) not disclose the information to anyone other than EPA employees without the prior written approval of the Assistant General Counsel for Contracts and Information Law; and (iii) return to the Contracting Officer all copies of the information, and any abstracts or excerpts therefrom, upon request by the Contracting Officer, whenever the information is no longer required by the Contractor for the performance of the work required by the contract, or upon completion of the contract.

(2) The Contractor shall obtain a written agreement to honor the above limitations from each of the Contractor's employees who will have access to the information before the employee is allowed access.

(3) The Contractor agrees that these contract conditions concerning the use and disclosure of confidential information are included for the benefit of, and shall be enforceable by, both EPA and any affected business having a proprietary interest in the information.

(4) The Contractor shall not use any confidential information supplied by EPA or obtained during performance hereunder to compete with any business to which the confidential information relates.

(b) The Contractor agrees to obtain the written consent of the Contracting Officer, after a written determination by the appropriate program office, prior to entering into any subcontract that will involve the disclosure of confidential business information by the Contractor to the subcontractor. The Contractor agrees to include this clause, including this paragraph (b), in all subcontracts awarded, pursuant to this contract, that require the furnishing of confidential business information to the subcontractor.

H.13 1552.235-73 ACCESS TO FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT CONFIDENTIAL BUSINESS INFORMATION (APR 1996).

In order to perform duties under the contract, the Contractor will need to be authorized for access to Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) confidential business information (CBI). The Contractor and all of its employees handling CBI while working under the contract will be required to follow the procedures contained in the security manual entitled "FIFRA Information Security Manual." These procedures include applying for FIFRA CBI access authorization for each individual working under the contract who will have access to FIFRA CBI, execution of confidentiality agreements, and designation by the Contractor of an individual to serve as a Document Control Officer. The Contractor will be required to abide by those clauses contained in EPAAR 1552.235-70, 1552.235-71, and 1552.235-77 that are appropriate to the activities set forth in the contract.

Until EPA has approved the Contractor's security plan, the Contractor may not be authorized for FIFRA CBI access away from EPA facilities.

H.14 1552.235-75 ACCESS TO TOXIC SUBSTANCES CONTROL ACT CONFIDENTIAL BUSINESS INFORMATION (APR 1996).

In order to perform duties under the contract, the Contractor will need to be authorized for access to Toxic Substances Control Act (TSCA) confidential business information (CBI). The Contractor and all of its employees handling CBI while working under the contract will be required to follow the procedures contained in the security manual entitled "TSCA Confidential Business Information Security Manual." These procedures include applying for TSCA CBI access authorization for each individual working under the contract who will have access to TSCA CBI, execution of confidentiality agreements, and designation by the Contractor of an individual to serve as a Document Control Officer. The Contractor will be required to abide by those clauses contained in EPAAR 1552.235-70, 1552.235-71, and 1552.235-78 that are appropriate to the activities set forth in the contract.

Until EPA has inspected and approved the Contractor's facilities, the Contractor may not be authorized for TSCA CBI access away from EPA facilities.

H.15 1552.235-76 TREATMENT OF CONFIDENTIAL BUSINESS INFORMATION (TSCA) (APR 1996)

a) The Project Officer (PO) or his/her designee, after a written determination by the appropriate program office, may disclose confidential business information (CBI) to the Contractor necessary to carry out the work required under this contract. The Contractor agrees to use the CBI only under the following conditions:

(1) The Contractor and Contractor's employees shall (i) use the CBI only for the purposes of carrying out the work required by the contract; (ii) not disclose the information to anyone other than properly cleared EPA employees without the prior written approval of the Assistant General Counsel for Information Law or his/her designee; and (iii) return the CBI to the PO or his/her designee, whenever the information is no longer required by the Contractor for performance of the work required by the contract, or upon completion of the contract.

(2) The Contractor shall obtain a written agreement to honor the above limitations from each of the Contractor's employees who will have access to the information before the employee is allowed access.

(3) The Contractor agrees that these contract conditions concerning the use and disclosure of CBI are included for the benefit of, and shall be enforceable by, both EPA and any affected businesses having a proprietary interest in the information.

(4) The Contractor shall not use any CBI supplied by EPA or obtained during performance hereunder to compete with any business to which the CBI relates.

(b) The Contractor agrees to obtain the written consent of the CO, after a written determination by the appropriate program office, prior to entering into any subcontract that will involve the disclosure of CBI by the Contractor to the subcontractor. The Contractor agrees to include this clause, including this paragraph (b), in all subcontracts awarded pursuant to this contract that require the furnishing of CBI to the subcontractor.

H.16 1552.235-77 DATA SECURITY FOR FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT CONFIDENTIAL BUSINESS INFORMATION. (DEC 1997)

The Contractor shall handle Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) confidential business information (CBI) in accordance with the contract clause entitled "Treatment of Confidential Business Information" and "Screening Business Information for Claims of Confidentiality," the provisions set forth below, and the Contractor's approved detailed security plan.

(a) The Project Officer (PO) or his/her designee, after a written determination by the appropriate program office, may disclose FIFRA CBI to the contractor necessary to carry out the work required under this contract. The Contractor shall protect all FIFRA CBI to which it has access (including CBI used in its computer operations) in accordance with the following requirements:

(1) The Contractor and Contractor's employees shall follow the security procedures set forth in the FIFRA Information Security Manual. The manual may be obtained from the Project Officer (PO) or the Chief, Information Services Branch (ISB), Program Management and Support Division, Office of Pesticide Programs (OPP) (H7502C), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

(2) The Contractor and Contractor's employees shall follow the security procedures set forth in the Contractor's security plan(s) approved by EPA.

(3) Prior to receipt of FIFRA CBI by the Contractor, the Contractor shall ensure that all employees who will be cleared for access to FIFRA CBI have been briefed on the handling, control, and security requirements set forth in the FIFRA Information Security Manual.

(4) The Contractor Document Control Officer (DCO) shall obtain a signed copy of the FIFRA "Contractor Employee Confidentiality Agreement" from each of the Contractor's employees who will have access to the information before the employee is allowed access.

(b) The Contractor agrees that these requirements concerning protection of FIFRA CBI are included for the benefit of, and shall be enforceable by, both EPA and any affected business having a proprietary interest in the information.

(c) The Contractor understands that CBI obtained by EPA under FIFRA may not be disclosed except as authorized by the Act, and that any unauthorized disclosure by the Contractor or the Contractor's employees may subject the Contractor and the Contractor's employees to the criminal penalties specified in FIFRA (7 U.S.C. 136h(f)). For purposes of this contract, the only disclosures that EPA authorizes the Contractor to make are those set forth in the clause entitled "Treatment of Confidential Business Information."

(d) The Contractor agrees to include the provisions of this clause, including this paragraph (d), in all subcontracts awarded pursuant to this contract that require the furnishing of CBI to the subcontractor.

(e) At the request of EPA or at the end of the contract, the Contractor shall return to the EPA PO or his/her designee all documents, logs, and magnetic media which contain FIFRA CBI. In addition, each Contractor employee who has received FIFRA CBI clearance will sign a "Confidentiality Agreement for Contractor Employees Upon Relinquishing FIFRA CBI Access Authority." The Contractor DCO will also forward those agreements to the EPA PO or his/her designee, with a copy to the CO, at the end of the contract.

(f) If, subsequent to the date of this contract, the Government changes the security requirements, the CO shall equitably adjust affected provisions of this contract, in accordance with the "Changes" clause when:

(1) The Contractor submits a timely written request for an equitable adjustment; and

(2) The facts warrant an equitable adjustment.

H.17 1552.235-78 DATA SECURITY FOR TOXIC SUBSTANCES CONTROL ACT CONFIDENTIAL BUSINESS INFORMATION. (DEC 1997)

The Contractor shall handle Toxic Substances Control Act (TSCA) confidential business information (CBI) in accordance with the contract clause entitled "Treatment of Confidential Business Information" and "Screening Business Information for Claims of Confidentiality."

(a) The Project Officer (PO) or his/her designee, after a written determination by the appropriate program office, may disclose TSCA CBI to the contractor necessary to carry out the work required under this contract. The Contractor shall protect all TSCA CBI to which it has access (including CBI used in its computer operations) in accordance with the following requirements:

(1) The Contractor and Contractor's employees shall follow the security procedures set forth in the TSCA CBI Security Manual. The manual may be obtained from the Director, Information Management Division (IMD), Office of Pollution Prevention and Toxics (OPPT), U.S. Environmental Protection Agency (EPA), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Prior to receipt of TSCA CBI by the Contractor, the Contractor shall ensure that all employees who will be cleared for access to TSCA CBI have been briefed on the handling, control, and security requirements set forth in the TSCA CBI Security Manual.

(2) The Contractor shall permit access to and inspection of the Contractor's facilities in use under this contract by representatives of EPA's Assistant Administrator for Administration and Resources Management, and the TSCA Security Staff in the OPPT, or by the EPA Project Officer.

(3) The Contractor Document Control Officer (DCO) shall obtain a signed copy of EPA Form 7740-6, "TSCA CBI Access Request, Agreement, and Approval," from each of the Contractor's employees who will have access to the information before the employee is allowed access. In addition, the Contractor shall obtain from each employee who will be cleared for TSCA CBI access all information required by EPA or the U.S. Office of Personnel Management for EPA to conduct a Minimum Background Investigation.

(b) The Contractor agrees that these requirements concerning protection of TSCA CBI are included for the benefit of, and shall be enforceable by, both EPA and any affected business having a proprietary interest in the information.

(c) The Contractor understands that CBI obtained by EPA under TSCA may not be disclosed except as authorized by the Act, and that any unauthorized disclosure by the Contractor or the Contractor's employees may subject the Contractor and the Contractor's employees to the criminal penalties specified in TSCA (15 U.S.C. 2613(d)). For purposes of this contract, the only disclosures that EPA authorizes the Contractor to make are those set forth in the clause entitled "Treatment of Confidential Business Information."

(d) The Contractor agrees to include the provisions of this clause, including this paragraph (d), in all subcontracts awarded pursuant to this contract that require the furnishing of CBI to the subcontractor.

(e) At the request of EPA or at the end of the contract, the Contractor shall return to the EPA PO or his/her designee, all documents, logs, and magnetic media which contain TSCA CBI. In addition, each Contractor employee who has received TSCA CBI clearance will sign EPA Form 7740-18, "Confidentiality Agreement for Contractor Employees Upon Relinquishing TSCA CBI Access Authority." The Contractor DCO will also forward those agreements to the EPA OPPT/IMD, with a copy to the CO, at the end of the contract.

(f) If, subsequent to the date of this contract, the Government changes the security requirements, the CO shall equitably adjust affected provisions of this contract, in accordance with the "Changes" clause, when:

(1) The Contractor submits a timely written request for an equitable adjustment; and,

(2) The facts warrant an equitable adjustment.

H.18 1552.235-79 RELEASE OF CONTRACTOR CONFIDENTIAL BUSINESS INFORMATION (APR 1996)

(a) The Environmental Protection Agency (EPA) may find it necessary to release information submitted by the Contractor either in response to this solicitation or pursuant to the provisions of this contract, to individuals not employed by EPA. Business information that is ordinarily entitled to confidential treatment under existing Agency regulations (40 CFR Part 2) may be included in the information released to these individuals. Accordingly, by submission of this proposal or signature on this contract or other contracts, the Contractor hereby consents to a limited release of its confidential business information (CBI).

(b) Possible circumstances where the Agency may release the Contractor's CBI include, but are not limited to the following:

(1) To other Agency contractors tasked with assisting the Agency in the recovery of Federal funds expended pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Sec. 9607, as amended, (CERCLA or Superfund);

(2) To the U.S. Department of Justice (DOJ) and contractors employed by DOJ for use in advising the Agency and representing the Agency in procedures for the recovery of Superfund expenditures;

(3) To parties liable, or potentially liable, for costs under CERCLA Sec. 107 (42 U.S.C. Sec. 9607), et al, and their insurers (Potentially Responsible Parties) for purposes of facilitating settlement or litigation of claims against such parties;

(4) To other Agency contractors who, for purposes of performing the work required under the respective contracts, require access to information the Agency obtained under the Clean Air Act (42 U.S.C. 7401 et seq.); the Federal Water Pollution Control Act (33 U.S.C.1251 et seq.); the Safe Drinking Water Act (42 U.S.C. 300f et seq.); the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136 et seq.); the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.); the Toxic Substances Control Act (15 U.S.C. 2601 et seq.); or the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et seq.);

(5) To other Agency contractors tasked with assisting the Agency in handling and processing information and documents in the administration of Agency contracts, such as providing both preaward and post award audit support and specialized technical support to the Agency's technical evaluation panels;

(6) To employees of grantees working at EPA under the Senior Environmental Employment (SEE) Program;

(7) To Speaker of the House, President of the Senate, or Chairman of a Committee or Subcommittee;

(8) To entities such as the General Accounting Office, boards of contract appeals, and the Courts in the resolution of solicitation or contract protests and disputes;

(9) To Agency contractor employees engaged in information systems analysis, development, operation, and maintenance, including performing data processing and management functions for the Agency; and

(10) Pursuant to a court order or court-supervised agreement.

(c) The Agency recognizes an obligation to protect the contractor from competitive harm that may result from the release of such information to a competitor. (See also the clauses in this document entitled "Screening Business Information for Claims of Confidentiality" and "Treatment of Confidential Business Information.") Except where otherwise provided by law, the Agency will permit the release of CBI under subparagraphs (1), (3), (4), (5), (6), or (9) only pursuant to a confidentiality agreement.

(d) With respect to contractors, 1552.235-71 will be used as the confidentiality agreement. With respect to Potentially Responsible Parties, such confidentiality agreements may permit further disclosure to other entities where necessary to further settlement or litigation of claims under CERCLA. Such entities include, but are not limited to accounting firms and technical experts able to analyze the information, provided that they also agree to be bound by an appropriate confidentiality agreement.

(e) This clause does not authorize the Agency to release the Contractor's CBI to the public pursuant to a request filed under the Freedom of Information Act.

(f) The Contractor agrees to include this clause, including this paragraph (f), in all subcontracts at all levels awarded pursuant to this contract that require the furnishing of confidential business information by the subcontractor.

H.19 1552.235-80 ACCESS TO CONFIDENTIAL BUSINESS INFORMATION (OCT 2000)

It is not anticipated that it will be necessary for the contractor to have access to confidential business information (CBI) during the performance of tasks required under this contract. However, the following applies to any and all tasks under which the contractor will or may have access to CBI:

The contractor shall not have access to CBI submitted to EPA under any authority until the contractor obtains from the

Project Officer a certification that the EPA has followed all necessary procedures under 40 CFR part 2, subpart B (and any other applicable procedures), including providing, where necessary, prior notice to the submitters of disclosure to the contractor.

H.20 1552.237-70 CONTRACT PUBLICATION REVIEW PROCEDURES. (APR 1984)

(a) Material generated under this contract intended for release to the public is subject to the Agency's publication review process in accordance with the EPA Order on this subject and the following.

(b) Except as indicated in paragraph (c) of this contract, the Contractor shall not independently publish or print material generated under this contract until after completion of the EPA review process. The Project Officer will notify the Contractor of review completion within 45 calendar days after the Contractor's transmittal to the Project Officer of material generated under this contract. If the Contractor does not receive Project Officer notification within this period, the Contractor shall immediately notify the Contracting Officer in writing.

(c) The Contractor may publish, in a scientific journal, material resulting directly or indirectly from work performed under this contract, subject to the following:

(1) The Contractor shall submit to the Contracting Officer and the Project Officer, at least 30 days prior to publication, a copy of any paper, article, or other dissemination of information intended for publication.

(2) The Contractor shall include the following statement in a journal article which has not been subjected to EPA review: "Although the research described in this article has been funded wholly or in part by the United States Environmental Protection Agency contract (number) to (Name of Contractor), it has not been subject to the Agency's review and therefore does not necessarily reflect the views of the Agency, and no official endorsement should be inferred."

(3) Following publication of the journal article, the Contractor shall submit five copies of the journal article to the Project Officer, and one copy to the Contracting Officer.

(d) If the Government has completed the review process and agreed that the contract material may be attributed to EPA, the Contractor shall include the following statement in the document:

This material has been funded wholly or in part by the United States Environmental Protection Agency under contract (number) to (name). It has been subject to the Agency's review, and it has been approved for publication as an EPA document. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

(e) If the Government has completed the review process, but decides not to publish the material, the Contractor may independently publish and distribute the material for its own use and its own expense, and shall include the following statement in any independent publication:

Although the information described in this article has been funded wholly or in part by the United States Environmental Protection Agency under contract (number) to (name), it does not necessarily reflect the views of the Agency and no official endorsement should be inferred.

H.21 1552.237-71 TECHNICAL DIRECTION. (AUG 2009)

(a) Definitions.

"Contracting officer technical representative (COTR)," means an individual appointed by the contracting officer in accordance with Agency procedures to perform specific technical and administrative functions.

"Task order," as used in this clause, means work assignment, delivery order, or any other document issued by the contracting officer to order work under a service contract.

(b) The contracting officer technical representative(s) may provide technical direction on contract or work request performance. Technical direction includes:

- (1) Instruction to the contractor that approves approaches, solutions, designs, or refinements; fills in details; completes the general descriptions of work shifts emphasis among work areas or tasks; and
- (2) Evaluation and acceptance of reports or other deliverables.

(c) Technical direction must be within the scope of work of the contract and any task order there under. The contracting officer technical representative(s) does not have the authority to issue technical direction which:

- (1) Requires additional work outside the scope of the contract or task order;
- (2) Constitutes a change as defined in the "Changes" clause;
- (3) Causes an increase or decrease in the estimated cost of the contract or task order;
- (4) Alters the period of performance of the contract or task order; or
- (5) Changes any of the other terms or conditions of the contract or task order.

(d) Technical direction will be issued in writing or confirmed in writing within five (5) days after oral issuance. The contractor will be copied on any technical direction issued by the contracting officer technical representative.

(e) If, in the contractor's opinion, any instruction or direction by the contracting officer technical representative(s) falls within any of the categories defined in paragraph (c) of the clause, the contractor shall not proceed but shall notify the contracting officer in writing within 3 days after receiving it and shall request that the contracting officer take appropriate action as described in this paragraph. Upon receiving this notification, the contracting officer shall:

- (1) Advise the contractor in writing as soon as practicable, but no later than 30 days after receipt of the contractor's notification, that the technical direction is within the scope of the contract effort and does not constitute a change under the "Changes" clause of the contract;
- (2) Advise the contractor within a reasonable time that the government will issue a written modification to the contract; or
- (3) Advise the contractor that the technical direction is outside the scope of the contract and is thereby rescinded.

(f) A failure of the contractor and contracting officer to agree as to whether the technical direction is within the scope of the contract, or a failure to agree upon the contract action to be taken with respect thereto, shall be subject to the provisions of the clause entitled "Disputes" in this contract.


(g) Any action(s) taken by the contractor, in response to any direction given by any person acting on behalf of the government or any government official other than the contracting officer or the contracting officer

technical representative, shall be at the contractor's risk.

H.22 1552.237-72 KEY PERSONNEL. (APR 1984)

(a) The Contractor shall assign to this contract the following key personnel:

(b)(4)



(b) During the first ninety (90) days of performance, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (c) of this clause. After the initial 90-day period, the Contractor shall submit the information required by paragraph (c) to the Contracting Officer at least 15 days prior to making any permanent substitutions.

(c) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the persons being replaced. The Contracting Officer will notify the Contractor within 15 calendar days after receipt of all required information of the decision on substitutions. This clause will be modified to reflect any approved changes of key personnel.

H.23 1552.237-76 GOVERNMENT-CONTRACTOR RELATIONS. (JUN 1999)

(a) The Government and the Contractor understand and agree that the services to be delivered under this contract by the contractor to the Government are non-personal services and the parties recognize and agree that no employer-employee relationship exists or will exist under the contract between the Government and the Contractor's personnel. It is, therefore, in the best interest of the Government to afford both parties a full understanding of their respective obligations.

(b) Contractor personnel under this contract shall not:

(1) Be placed in a position where they are under the supervision, direction, or evaluation of a Government employee.

(2) Be placed in a position of command, supervision, administration or control over Government personnel, or over personnel of other Contractors under other EPA contracts, or become a part of the Government organization.

(3) Be used in administration or supervision of Government procurement activities.

(c) Employee relationship. (1) The services to be performed under this contract do not require the Contractor or his/her personnel to exercise personal judgment and discretion on behalf of the Government. Rather the Contractor's personnel will act and exercise personal judgment and discretion on behalf of the Contractor.

(2) Rules, regulations, directives, and requirements that are issued by the U.S. Environmental Protection Agency under its responsibility for good order, administration, and security are applicable to all personnel who enter the Government installation or who travel on Government transportation. This is not to be construed or interpreted to establish any degree of Government control that is inconsistent with a non-personal services contract.

(d) Inapplicability of employee benefits. This contract does not create an employer-employee relationship. Accordingly, entitlements and benefits applicable to such relationships do not apply.

(1) Payments by the Government under this contract are not subject to Federal income tax withholdings.

(2) Payments by the Government under this contract are not subject to the Federal Insurance Contributions Act.

(3) The Contractor is not entitled to unemployment compensation benefits under the Social Security Act, as amended, by virtue of performance of this contract.

(4) The Contractor is not entitled to workman's compensation benefits by virtue of this contract.

(5) The entire consideration and benefits to the Contractor for performance of this contract is contained in the provisions for payment under this contract.

(e) Notice. It is the Contractor's, as well as, the Government's responsibility to monitor contract activities and notify the Contracting Officer if the Contractor believes that the intent of this clause has been or may be violated.

(1) The Contractor should notify the Contracting Officer in writing promptly, within 14 (to be negotiated and inserted into the basic contract at contract award) calendar days from the date of any incident that the Contractor considers to constitute a violation of this clause. The notice should include the date, nature and circumstance of the conduct, the name, function and activity of each Government employee or Contractor official or employee involved or knowledgeable about such conduct, identify any documents or substance of any oral communication involved in the conduct, and the estimate in time by which the Government must respond to this notice to minimize cost, delay or disruption of performance.

(2) The Contracting Officer will promptly, within 14 (to be negotiated and inserted into the basic contract at contract award) calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer will either:

(i) Confirm that the conduct is in violation and when necessary direct the mode of further performance,

(ii) Countermand any communication regarded as a violation,

(iii) Deny that the conduct constitutes a violation and when necessary direct the mode of further performance; or

(iv) In the event the notice is inadequate to make a decision, advise the Contractor what additional information is required, and establish the date by which it should be furnished by the Contractor and the date thereafter by which the

Government will respond.

H.24 1552.237-75 PAPERWORK REDUCTION ACT (APR 1984)

If it is established at award or subsequently becomes a contractual requirement to collect identical information from ten (10) or more public respondents, the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq. applies. In that event, the Contractor shall not take any action to solicit information from any of the public respondents until notified in writing by the Contracting officer that the required Office of Management and Budget (OMB) final clearance was received.

H.24 1552.239-70 REHABILITATION ACT NOTICE. (OCT 2000)

(a) EPA has a legal obligation under the Rehabilitation Act of 1973, 29 U.S.C. 791, to provide reasonable accommodation to persons with disabilities who wish to attend EPA programs and activities. Under this contract, the contractor may be required to provide support in connection with EPA programs and activities, including conferences, symposia, workshops, meetings, etc. In such cases, the contractor shall, as applicable, include in its draft and final meeting announcements (or similar documents) the following notice:

It is EPA's policy to make reasonable accommodation to persons with disabilities wishing to participate in the agency's programs and activities, pursuant to the Rehabilitation Act of 1973, 29 U.S.C. 791. Any request for accommodation should be made to the specified registration contact for a particular program or activity, preferably one month in advance of the registration deadline, so that EPA will have sufficient time to process the request.

(b) Upon receipt of such a request for accommodation, the contractor shall immediately forward the request to the EPA contracting officer, and provide a copy to the appropriate EPA program office. The contractor may be required to provide any accommodation that EPA may approve. However, in no instance shall the contractor proceed to provide an accommodation prior to receiving written authorization from the contracting officer.

(c) The contractor shall insert in each subcontract or consultant agreement placed hereunder provisions that shall conform substantially to the language of this clause, including this paragraph, unless otherwise authorized by the contracting officer.

H.25 LOCAL CLAUSE EPA-H-27-103 APPLICATION OF RIGHTS IN DATA – SPECIAL WORKS CLAUSE

The Rights in Data--Special Works clause (FAR 52.227-17) shall apply to work assignments or task orders "...that are primarily for the production or compilation of data (other than limited rights data or restricted computer software) for the Government's own use..." or when the Contracting Officer determines that there is a specific need to limit data distribution first produced under a particular work assignment or task order. The Rights in Data--Special Works clause (FAR 52.227-17) shall apply to work assignments or task orders which are included in the examples set forth in FAR 27.405(a)(1) and also to other work assignments or task orders specifically identified by the Contracting Officer.

H.26 LOCAL CLAUSE EPA-H-42-102 UTILIZATION OF FEDCONNECT FOR CONTRACT ADMINISTRATION (MAR 2013)

EPA will utilize the FedConnect® web portal in administering this contract. The contractor must be registered in FedConnect® and have access to the FedConnect website located at <https://www.fedconnect.net/Fedconnect/>. For assistance in registering or for other FedConnect® technical questions please call the FedConnect® Help Desk at (800) 899-6665 or email at support@fedconnect.net.

H.27 LOCAL CLAUSE EPA H-31-104 APPROVAL OF CONTRACTOR TRAVEL

(a) For purposes of this clause, the term "travel" does not include local transportation. "Local Transportation" is defined as travel within 50 miles from the contractor personnel's assigned work location for performance of the contract that does not involve an overnight stay.

(b) Any contractor travel which may be directly charged to the contract must be authorized in advance by the Contract-Level COR. This approval shall be separate from the process associated with the approval of work plans. (See paragraph (f) below).

(c) Travel shall be authorized under this contract only when the travel is required to provide a direct service (including management oversight) or specific product to the Government that is identified in the contract's Statement of Work (and/or any applicable work assignment). The contractor shall identify the need for travel in any work plans submitted and shall clearly identify in an accompanying narrative the relationship of the travel to the direct service required by the Government. Unless/until the Contract-Level COR specifically approves the travel proposed under a work assignment (apart from approval of the remainder of the work assignment- see paragraph (e) below), the contractor shall not perform travel. Travel and associated costs for such travel (lodging, per diem, and incidental expenses) shall be allowable only in accordance with the limitations of FAR 31.205-43 and FAR 31.205-46.

(d) Travel expenses for Federal employees shall not be an allowable cost under this contract. Travel approval shall not be rendered for any personnel (including for example State or local government officials, academicians, etc.) except for employees of the contractor, or an authorized subcontractor or consultant, who are performing a bona fide function to accomplish the Statement of Work.

(e) To obtain the approval for travel, the contractor shall submit a separate written request to the Contract-Level COR for each instance of travel for the contractor (including subcontractors/consultants) that is contemplated as a direct charge under the contract. The request shall include (at a minimum) the following information:

(1) Individual(s) traveling. Identify position and affiliation as a contractor/subcontractor employee or authorized consultant.

(2) Description of circumstances necessitating the travel. Identify the work assignment(s) that will benefit from the travel and detail the correlation of the travel to the requirements of the Statement of Work.

(3) Identify the estimated cost and include a cost breakdown. Explain why this is the most cost effective means to fulfill the contract requirements.

(f) Approval of work plans that include travel as an other direct cost element shall not be construed to mean the travel is approved; i.e., separate approval shall be obtained from the Contract-Level COR.

(g) While on travel, Contractor personnel shall clearly identify corporate affiliation at the start of any meeting. While attending EPA-sponsored meetings, conferences, symposia, etc. or while on a Government site, Contractor personnel shall wear a badge which identifies the individual as a contractor employee. Contractor personnel are strictly prohibited from acting as an official representative of the Agency at meetings, conferences, symposia, etc.

H.28 EPA-H-28-102 MINIMUM INSURANCE REQUIREMENTS

As described in FAR 52.228-7, the following are the minimum amounts of insurance required under the contract:

Workers compensation and employer's liability- \$1,000,000

Comprehensive general liability- \$1,000,000
Comprehensive automobile liability- \$1,000,000

H.29 EPA-H-09-107 – Unpaid Federal Tax Liability & Felony Criminal Violation Certification (APR 2012)

(a) In order to meet the requirements of Sections 433 and 434 of Division E of the Consolidated Appropriations Act, 2012 (Pub.L. 112-74) and 2013 Continuing Appropriations Resolution (Pub.L. 112-175), the contractor shall provide the contracting officer a certification whereby the contractor certifies:

- (i) It is not a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months; and
- (ii) It is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

(b) Failure of the contractor to furnish a certification or provide such additional information as requested by the Contracting Officer may render the contractor ineligible for FY 2012 or 2013 contract funding.

(c) The contractor has a continuing obligation to update the subject certification as required.

SECTION I –CONTRACT CLAUSES

52.202-1 DEFINITIONS. (JAN 2012)

52.203-3 GRATUITIES. (APR 1984)

52.203-5 COVENANT AGAINST CONTINGENT FEES. (APR 1984)

52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT. (SEP 2006)

52.203-7 ANTI-KICKBACK PROCEDURES. (OCT 2010)

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY. (JAN 1997)

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY. (JAN 1997)

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS. (OCT 2010)

52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT. (APR 2010)

52.203-17 CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (SEP 2013)

52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER. (MAY 2011)

52.204-7 SYSTEM FOR AWARD MANAGEMENT. (DEC 2012)

52.204-10 REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS. (JUL 2013)

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT. (AUG 2013)

52.210-1 MARKET RESEARCH (APR 2011)

52.215-2 AUDIT AND RECORDS - NEGOTIATION. (OCT 2010)

52.215-8 ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT. (OCT 1997)

52.215-11 PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA - MODIFICATIONS. (AUG 2011)

52.215-13 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA - MODIFICATIONS. (OCT 2010)

52.215-15 PENSION ADJUSTMENTS AND ASSET REVERSIONS. (OCT 2010)

52.215-18 REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS. (JUL 2005)

52.215-19 NOTIFICATION OF OWNERSHIP CHANGES. (OCT 1997)

52.215-21 REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA - MODIFICATIONS. (OCT 2010)

52.215-23 LIMITATIONS ON PASS-THROUGH CHARGES. (OCT 2009)

52.216-7 ALLOWABLE COST AND PAYMENT. (JUN 2013)

52.216-8 FIXED FEE. (JUN 2011)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS. (JUL 2013)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN. (JUL 2013) – ALTERNATE II (OCT 2001)

52.219-16 LIQUIDATED DAMAGES - SUBCONTRACTING PLAN. (JAN 1999)

52.219-25 SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM-DISADVANTAGED STATUS AND REPORTING. (JUL 2013)

52.222-3 CONVICT LABOR. (JUN 2003)

52.222-21 PROHIBITION OF SEGREGATED FACILITIES. (FEB 1999)

52.222-26 EQUAL OPPORTUNITY. (MAR 2007)

52.222-35 EQUAL OPPORTUNITY FOR VETERANS. (SEP 2010)

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES. (OCT 2010)

52.222-37 EMPLOYMENT REPORTS ON VETERANS. (SEP 2010)

52.222-40 NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEC 2010)

52.222-50 COMBATING TRAFFICKING IN PERSONS. (FEB 2009)

52.222-54 EMPLOYMENT ELIGIBILITY VERIFICATION. (JUL 2012)

52.223-6 DRUG-FREE WORKPLACE. (MAY 2001)

52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING. (AUG 2011)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES. (JUN 2008)

52.227-1 AUTHORIZATION AND CONSENT. (DEC 2007)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT. (DEC 2007)

552.227-14 RIGHTS IN DATA - GENERAL. (DEC 2007)

52.227-14 RIGHTS IN DATA--GENERAL (DEC 2007) -- ALTERNATE I (DEC 2007)

52.227-14 RIGHTS IN DATA - GENERAL. (DEC 2007) -- ALTERNATE II (DEC 2007)

52.227-14 RIGHTS IN DATA - GENERAL. (DEC 2007) -- ALTERNATE III (DEC 2007)

52.227-16 ADDITIONAL DATA REQUIREMENTS. (JUN 1987)

52.227-17 RIGHTS IN DATA--SPECIAL WORKS (DEC 2007)

52.230-2 COST ACCOUNTING STANDARDS. (MAY 2012)

52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS. (JUN 2010)

52.232-17 INTEREST. (OCT 2010)

52.232-20 LIMITATION OF COST. (APR 1984)

52.232-22 LIMITATION OF FUNDS. (APR 1984)

52.232-23 ASSIGNMENT OF CLAIMS. (JAN 1986)

52.232-25 PROMPT PAYMENT. (JUL 2013) – ALTERNATE 1 (FEB 2002)

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER – SYSTEM FOR AWARD MANAGEMENT. (JUL 2013)

52.232-39 UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUN 2013)

52.233-1 DISPUTES. (JUL 2002) – ALTERNATE 1 (DEC 1991)

52.233-3 PROTEST AFTER AWARD. (AUG 1996) - ALTERNATE I (JUN 1985)

52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM. (OCT 2004)

52.242-1 NOTICE OF INTENT TO DISALLOW COSTS. (APR 1984)

52.242-3 PENALTIES FOR UNALLOWABLE COSTS. (MAY 2001)

52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS. (JAN 1997)

52.242-13 BANKRUPTCY. (JUL 1995)

52.243-2 CHANGES - COST-REIMBURSEMENT. (AUG 1987) - ALTERNATE I (APR 1984)

52.244-5 COMPETITION IN SUBCONTRACTING. (DEC 1996)

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS. (DEC 2010)

52.245-1 GOVERNMENT PROPERTY. (APR 2012)

52.245-9 USE AND CHARGES. (APR 2012)

52.246-25 LIMITATION OF LIABILITY - SERVICES. (FEB 1997)

52.249-6 TERMINATION (COST-REIMBURSEMENT). (MAY 2004)

52.249-14 EXCUSABLE DELAYS. (APR 1984)

52.253-1 COMPUTER GENERATED FORMS. (JAN 1991)

I.1 52.203-14 DISPLAY OF HOTLINE POSTER(S). (DEC 2007)

(a) Definition.

"United States," as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) Display of fraud hotline poster(s). Except as provided in paragraph (c)--

(1) During contract performance in the United States, the Contractor shall prominently display in common work areas within business segments performing work under this contract and at contract work sites--

(i) Any agency fraud hotline poster or Department of Homeland Security (DHS) fraud hotline poster identified in paragraph (b)(3) of this clause; and

(ii) Any DHS fraud hotline poster subsequently identified by the Contracting Officer.

(2) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.

(3) Any required posters may be obtained as follows:

Poster(s) Obtain from

Environmental Protection Agency (EPA), Office of Inspector General (OIG), Fraud Hotline Poster, can be downloaded here:

http://www.epa.gov/oig/reports/nonReportPdfs/EPA_OIG_Hotline_Poster2012.pdf

(c) If the Contractor has implemented a business ethics and conduct awareness program, including a reporting mechanism, such as a hotline poster, then the Contractor need not display any agency fraud hotline posters as required in paragraph (b) of this clause, other than any required DHS posters.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed \$5,000,000, except when the subcontract--

(1) Is for the acquisition of a commercial item; or

(2) Is performed entirely outside the United States.

I.2 52.209-9 UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS (JUL 2013)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the System for Award Management database via <https://www.acquisition.gov>.

(b) As required by section 3010 of the Supplemental Appropriations Act, 2010 (Pub. L. 111-212), all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIIS consist of two segments—

(1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by—

(i) Government personnel and authorized users performing business on behalf of the Government; or

(ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIIS is automatically transferred after a waiting period of 14 calendar days, except for--

(i) Past performance reviews required by subpart 42.15;

(ii) Information that was entered prior to April 15, 2011; or

(iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the non-public segment of FAPIIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIIS.

(2) The Contractor will also have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) As required by section 3010 of Pub. L. 111-212, all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(d) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600

I.3 52.217-8 OPTION TO EXTEND SERVICES. (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 15 to 90 days prior to the expiration of the contract.

I.4 52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS. (JAN 2011)

(a) Definitions. See 13 CFR 125.6(e) for definitions of terms used in paragraph (d).

(b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except -

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and

(ii) Otherwise successful offers from small business concerns.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer. These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(4) When the two highest rated offerors are a HUBZone small business concern and a large business, and the evaluated offer of the HUBZone small business concern is equal to the evaluated offer of the large business after considering the price evaluation preference, award will be made to the HUBZone small business concern.

(c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraphs (d) and (e) of this clause do not apply if the offeror has waived the evaluation preference.

[] Offeror elects to waive the evaluation preference.

(d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for -

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or

other HUBZone small business concerns;

(3) General construction. (i) At least 15 percent of the cost of contract performance to be incurred for personnel will be spent on the prime contractor's employees;

(ii) At least 50 percent of the cost of the contract performance to be incurred for personnel will be spent on the prime contractor's employees or on a combination of the prime contractor's employees and employees of HUBZone small business concern subcontractors;

(iii) No more than 50 percent of the cost of contract performance to be incurred for personnel will be subcontracted to concerns that are not HUBZone small business concerns; or

(4) Construction by special trade contractors. (i) At least 25 percent of the cost of contract performance to be incurred for personnel will be spent on the prime contractor's employees;

(ii) At least 50 percent of the cost of the contract performance to be incurred for personnel will be spent on the prime contractor's employees or on a combination of the prime contractor's employees and employees of HUBZone small business concern subcontractors;

(iii) No more than 50 percent of the cost of contract performance to be incurred for personnel will be subcontracted to concerns that are not HUBZone small business concerns.

(e) A HUBZone joint venture agrees that the aggregate of the HUBZone small business concerns to the joint venture, not each concern separately, will perform the applicable percentage of work requirements.

(f)(1) When the total value of the contract exceeds \$25,000, a HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business concern manufacturers.

(2) When the total value of the contract is equal to or less than \$25,000, a HUBZone small business concern nonmanufacturer may provide end items manufactured by other than a HUBZone small business concern manufacturer provided the end items are produced or manufactured in the United States.

(3) Paragraphs (f)(1) and (f)(2) of this section do not apply in connection with construction or service contracts.

(g) Notice. The HUBZone small business offeror acknowledges that a prospective HUBZone awardee must be a HUBZone small business concern at the time of award of this contract. The HUBZone offeror shall provide the Contracting Officer a copy of the notice required by 13 CFR 126.501 if material changes occur before contract award that could affect its HUBZone eligibility. If the apparently successful HUBZone offeror is not a HUBZone small business concern at the time of award of this contract, the Contracting Officer will proceed to award to the next otherwise successful HUBZone small business concern or other offeror.

I.5 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION. (JUL 2013)

(a) Definitions. As used in this clause--

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause. Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall rerepresent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts—

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at <http://www.sba.gov/content/table-small-business-size-standards> .

(d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.

(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation required by paragraph (b) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

The Contractor represents that it [] is, [] is not a small business concern under NAICS Code _____ assigned to contract number _____. [Contractor to sign and date and insert authorized signer's name and title].

I.6 52.222-2 PAYMENT FOR OVERTIME PREMIUMS. (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium does not exceed 0 or the overtime premium is paid for work -

- (1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;
- (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;
- (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
- (4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall -

- (1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;
- (2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;
- (3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and
- (4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

* Insert either "zero" or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in subparagraph (a)(1) through (a)(4) of the clause.

I.7 52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED ITEMS. (MAY 2008)

(a) Definitions. As used in this clause -

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall -

(1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and

(2) Submit this estimate to

[Contracting Officer]U.S. EPA CPOD
26 W. Martin Luther King Dr.
Cincinnati, OH 45268.

I.8 52.244-2 SUBCONTRACTS. (OCT 2010) - ALTERNATE I (JUN 2007)

(a) Definitions. As used in this clause -

"Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that -

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds -

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts: None

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c) or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting -

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason certified cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element,

management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c), or (d) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed-fee subcontract, or (ii) fixed-price subcontract that exceeds either the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (e)(1)(i) through (e)(1)(iv) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination -

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

Cost Type:

(b)(4)

Fixed Rate/T&M:

(b)(4)

(b)(4)

I.9 52.247-67 SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT. (FEB 2006)

(a) The Contractor shall submit to the address identified below, for prepayment audit, transportation documents on which the United States will assume freight charges that were paid--

(1) By the Contractor under a cost-reimbursement contract; and

(2) By a first-tier subcontractor under a cost-reimbursement subcontract thereunder.

(b) Cost-reimbursement Contractors shall only submit for audit those bills of lading with freight shipment charges exceeding \$100. Bills under \$100 shall be retained on-site by the Contractor and made available for on-site audits. This exception only applies to freight shipment bills and is not intended to apply to bills and invoices for any other transportation services.

(c) Contractors shall submit the above referenced transportation documents to--

U.S. EPA
CPOD Mail Stop: NWD-001
26 W. Martin Luther King Dr.
Cincinnati, OH 45268

I.10 52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): <http://farsite.hill.af.mil/>

I.11 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES. (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Environmental Protection Agency Acquisition Regulation (EPAAR) (48 CFR 15) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

**I.12 1552.227-76 ALT I PROJECT EMPLOYEE CONFIDENTIALITY AGREEMENT (MAY 1994)
ALTERNATE I (JUNE 1994) (DEVIATION)**

(a) The Contractor recognizes that Contractor employees in performing this contract may have access to data, either provided by the Government or first generated during contract performance, of a sensitive nature which should not be released to the public without Environmental Protection Agency (EPA) approval. Therefore, the Contractor agrees to obtain confidentiality agreements from all of its employees working on requirements under this contract.

(b) Such agreements shall contain provisions which stipulate that each employee agrees that the employee will not disclose, either in whole or in part, to any entity external to EPA, the Department of Justice, or the Contractor, any information or data (as defined in FAR Section 27.401) provided by the Government or first generated by the Contractor under this contract, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the EPA Contracting Officer. If a contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the Contractor must provide immediate advance notification to the EPA so that the EPA can authorize such disclosure or have the opportunity to take action to prevent such disclosure. Such agreements shall be effective for the life of the contract and for a period of five (5) years after completion of the contract.

(c) The EPA may terminate this contract for convenience, in whole or in part, if it deems such termination necessary to prevent the unauthorized disclosure of information to outside entities. If such a disclosure occurs without the written permission of the EPA Contracting Officer, the Government may terminate the contract, for default or convenience, or pursue other remedies as may be permitted by law or this contract.

(d) The Contractor further agrees to insert in any subcontract or consultant agreement placed hereunder provisions which shall conform substantially to the language of this clause, including this paragraph (d), unless otherwise authorized by the Contracting Officer.

I.13 52.247-1 COMMERCIAL BILL OF LADING NOTATIONS (FEB 2006)

When the Contracting Officer authorizes supplies to be shipped on a commercial bill of lading and the Contractor will be reimbursed these transportation costs as direct allowable costs, the Contractor shall ensure before shipment is made that the commercial shipping documents are annotated with either of the following notations, as appropriate:

(a) If the Government is shown as the consignor or the consignee, the annotation shall be:

Transportation is for the Environmental Protection Agency and the actual total transportation charges paid to the carrier(s) by the consignor or consignee are assignable to, and shall be reimbursed by, the Government.

(b) If the Government is not shown as the consignor or the consignee, the annotation shall be:

Transportation is for the Environmental Protection Agency and the actual total transportation charges paid to the carrier(s) by the consignor or consignee shall be reimbursed by the Government, pursuant to cost-reimbursement contract No. EP-C-14-001. This may be confirmed by contacting

U.S. EPA
CPOD
Mail Stop: NWD-001
26 W. Martin Luther King Dr.
Cincinnati, OH 45268

Section J -List of Documents, Exhibits and Other Attachments

Attachment Number	Attachment Title	Number of Pages
1	Performance Work Statement	19
2	Quality Assurance Surveillance	2

PERFORMANCE WORK STATEMENT TECHNICAL SUPPORT FOR HUMAN HEALTH RISK ASSESSMENT

I. INTRODUCTIONⁱ

The Office of Research and Development's (ORD) National Center for Environmental Assessment (NCEA) serves as the resource center for the overall process of human health and ecological risk assessment: the integration of hazard, dose-response, and exposure data and models to produce risk characterizations. The organizational structure of the NCEA consists of an immediate office located in Washington, DC and three divisions (Cincinnati, OH; RTP, NC; and Washington, DC). The NCEA occupies a critical position in the ORD between (a) the researchers in other ORD components who are generating new findings and data, and (b) the regulators in the EPA program offices and regions that make regulatory, enforcement, and remedial action decisions.

II. PURPOSE AND SCOPE

This contract shall provide the NCEA with support for (1) conducting risk assessments on environmental stressors (i.e., physical, chemical, microbial, or other agent forms), and (2) developing state-of-the-art methods, models, and guidance documents for human health risk assessment. The Contractor shall provide support for assessments and research to improve the science and practice of risk assessment in two key areas: single stressor risk assessment, and stressor combinations or mixture risk assessment. All work performed under this contract will be ordered through work assignments issued by the Contracting Officer (CO).

The Contractor shall furnish all supplies, personnel, facilities, and equipment necessary to complete the specific areas of each work assignment. All delivered documents and reports shall be submitted in draft form for the Agency's review. Required revisions may be provided by the Agency to the Contractor for incorporation into final documents.

III. SPECIFIC AREAS OF WORK

The Contractor shall provide all technical support within the scope of this Performance Work Statement (PWS). The Contractor shall perform tasks, as specified by individual work assignments issued by the CO, in the following program areas: Methods Development, Assessment Development, and Risk Assessment Guidance and Support. The Contractor shall be capable of performing a range of risk assessment tasks in each of the four elements of the National Academy of Science's risk assessment paradigm: hazard identification, dose-response assessment, exposure assessment, and risk characterization.

The tasks, which will be issued through work assignments, commonly require expertise in multiple disciplines such as epidemiology, toxicology (see specialized disciplines identified in A.1 (a) below), pharmacology, physiology, pathology, microbiology, infectious disease epidemiology, public health, decision analysis, quantitative dose-response assessment, quantitative uncertainty analysis, human health economics, exposure modeling, statistics, biostatistics, chemistry, and mathematical modeling, including Benchmark Dose (BMD) modeling, physiologically-based pharmacokinetic (PBPK) modeling, exposure modeling, and computational toxicology modeling.

For many tasks, scientific needs are highly specialized, requiring expert personnel having the knowledge and ability to fully and critically evaluate study methodologies and results in the technical disciplines identified above. Analyses must be scientifically sound and sufficiently documented to withstand intensive critical examination and review by other experts in the relevant disciplines.

A. Assessment Issues and Documents

The Contractor shall develop, revise, review, and update, and/or evaluate various scientific documents and reports used by the NCEA to assess the nature and degree of risk posed by contaminants (chemical, physical, mixtures, and biological/microbial) in a variety of media. National and international scientific literature, unpublished studies, and investigations still in progress may be sources of information. The Contractor shall conduct literature searches and use EPA's Health and Environmental Research Online (HERO) to retrieve hardcopies or electronic copies of key studies. Specific tasks may include any of the following:

1. Human Health Assessment Documents

- a) Prepare, revise, or review component or comprehensive chemical hazard or qualitative risk assessment documents that serve as baseline assessment documentation for the development of consensus positions in EPA's Integrated Risk Information System (IRIS). IRIS contains agent-specific summaries of qualitative and quantitative health information in support of the first two steps of the risk assessment process, i.e., hazard identification and dose-response evaluation. IRIS information includes the reference dose (RfD) for noncancer health effects resulting from oral exposure, the reference concentration (RfC) for noncancer health effects resulting from inhalation exposure, and the carcinogen assessment for both oral and inhalation exposure. Combined with specific situational exposure assessment information, the health hazard information in IRIS may be used as a source in evaluating risks from environmental contaminants. All IRIS assessments are developed using basic procedures in current IRIS Standard Operating Procedures (SOPs).

The following activities may be required in development of an IRIS chemical assessment:

- Literature search for health hazard information using the sources specified in the IRIS SOPs, supplemented by other sources specified by the EPA or in search strategies proposed by the Contractor.
- Development of abstracts for relevant articles found in the literature search.
- Use of HERO tools for literature identification, classification, and other bibliographic

functions.

- Development of IRIS Toxicological Reviews and other documents, which summarize relevant literature, identify human health hazards, evaluate studies, select studies and endpoints on which to base toxicity, evaluate plausible modes of action and commonalities for cancer and noncancer endpoints, and perform quantitative dose-response assessments using state-of-the-science methodologies (including BMD modeling, and PBPK analysis, where appropriate). Development of these documents will require theoretical and/or empirical approaches and expert scientific judgment. Depending on the chemical, experts are often needed in the areas of epidemiology, toxicology (with specialized expertise commonly needed in fields including, but not limited to, carcinogenesis bioassays and mechanisms, reproductive/developmental toxicology, neurotoxicology, and Immunotoxicology), genotoxicity, and pathology, statistics (including dose-response modeling, and biostatistical analysis of epidemiology data), dosimetry and physiologically-based pharmacokinetic modeling and biologically-based dose-response modeling, and biochemistry. In many tasks, scientific needs are highly specialized, requiring expert personnel with the knowledge and ability to fully and critically evaluate study methodologies and results in the technical disciplines identified above. Assessment documents must be state of the art scientific work products based on critical evaluation and analyses of the biological effects and health risks of the chemical or other stressor. These assessments must be recognized, nationally and internationally, as scientifically sound and authoritative.
- Summarize comments on IRIS assessments at all stages of the review process including NCEA review, Agency review, Interagency review, and External Peer review. Prepare responses to comments and revise the Toxicological Review as needed to respond to the comments.
- Provide technical editing of IRIS documents. Technical editing may include editing of the document to ensure correct grammar, spelling, punctuation, usage, and appearance of tables and figures; checking references, generating reference lists and related tasks using HERO; checking page numbers, checking for correct formatting in conformance with the IRIS SOPs and templates; and other details of style. It may also include substantive editing including rewriting or rearranging sentences, paragraphs, or sections; arranging or rearranging tabular material; redrawing and retouching illustrations; standardizing symbols; checking and standardizing equations; and checking numbers in the text against figures and tables to insure consistency.
- Provide support to address cross-cutting issues common to multiple IRIS assessments. Examples of such issues include what criteria to use in selecting critical endpoints for deriving RfDs and RfCs, how to select values for uncertainty factors, how to perform a dose-response assessment for a chemical that produces more than one tumor type, and how to evaluate a database to select a cancer weight of evidence descriptor. Activities may include, but are not limited to, analyzing entries on the IRIS database to determine past and current practices, developing issue papers, performing statistical analysis, developing mathematical models or adapting models from the literature, and identifying and engaging experts to provide methods and analysis to address the issues.

- b) Prepare other human health assessments. The assessment documents shall generally focus on the development of cancer dose-response functions and derivation of oral RfD and inhalation RfC values, and may include mode of action descriptions as well as dose-response modeling. Assessments may be limited to one toxic endpoint, such as carcinogenicity or developmental toxicity, or cover multiple endpoints, such as all noncancer health endpoints, in the style, scope, and format provided for in the work assignment. While most assessments will focus on chronic exposures and related adverse health effects, assessments dealing with acute exposures, and their effects, may also be required.
- c) Develop or revise provisional peer reviewed toxicity value (PPRTV) assessments. PPRTVs are developed in accordance with EPA chemical toxicity assessment practices, generally for less common chemicals with smaller databases. PPRTVs generally identify one critical study and do not incorporate the extensive modeling typical for an IRIS assessment.
- d) Prepare, review, or revise portions (e.g., chapters or volumes) of large integrated (health plus ecological effects plus exposure assessment) risk assessment documents. These assessments are to be consistent with domestic and international guidelines.
- e) Prepare, revise, or review documents that conduct quantitative risk assessments for stressor mixtures. These assessments may require both exposure and toxicity evaluations and must be consistent with U.S. EPA Agency guidance documents (U.S. EPA, 1986, 2000) (examples of guidance documents are available here: www.epa.gov/riskassessment/guidance.htm). Epidemiological assessments of chemical mixtures may also be included when such data are available.

2. Exposure Assessment Documents for Contaminants, Mixtures, Media- or Site-Specific Cases

- a) Determine exposure or potential exposure from pollution/contaminant sources (including background levels) by evaluating measured or modeled biological, chemical, or physical concentrations or gradients at the interface between an organism and an environmental medium of concern, as specified in individual work assignments. Estimate internal doses and target organ doses of chemicals; this may include the development of dynamic PBPK models.
- b) Estimate or evaluate human populations potentially exposed to pollutants from the sources described in Section III.A.2(a) above, and identify any sensitive subpopulations listed in “Guidelines for Exposure Assessment,” EPA 600/Z/92/001 (available here: www.epa.gov/riskassessment/guidance.htm), or as otherwise specified in individual work assignments.
- c) Estimate or evaluate bioaccumulation and/or bioavailability of pollutants in different media (i.e., air, soil, sediment, ground water, surface water, biosolids, food chain, distribution systems, etc.) to

various human populations per “Guidelines for Exposure Assessment,” EPA 600/Z/92/001 (available here: www.epa.gov/riskassessment/guidance.htm), or as otherwise specified in individual work assignments.

- d) Perform various statistical or computational analyses to support the development of specific dose exposure assessments such as: distributions of exposure; human activity patterns; indoor vs. outdoor exposures; human migration patterns; gender-specific, age-specific, ethnic specific factors; chemical contact rates and pathways in food/water consumption patterns and habits; and regional or neighborhood exposure patterns.

3. Site or Community Based Risk Assessments

The Contractor shall develop risk values and information that is suitable for various end-uses, including conducting cost-benefit analyses (c.f., Dockins et al. 2004; Rice et al. 2006). The Contractor shall perform these exposure and risk analyses in accordance with guidance specified in individual work assignments. Risk analysis may be conducted in conjunction with different risk management alternatives.

4. Public Health Outcomes

The Contractor shall provide technical expertise in 1) identifying specific and readily identifiable indicators of the health status of humans exposed to environmental contaminants; 2) identifying human health conditions from experimental studies with research animals, humans, and from human population and/or field studies; 3) the ability to link sources of environmental contaminants to human exposures, to quantify human exposures, and to predict the likelihood of individual indicators of health status (human health conditions) resulting from such exposure. The Contractor shall review, interpret, and synthesize economic studies (e.g., valuation studies that estimate benefits of reducing health risks), and it shall have an ability to assign health outcomes (i.e., symptoms like fatigue, injury, morbidity effects, death) related to the economically meaningful health effects economic values (weights) in units commonly employed in the estimation of benefits.

5. Integrated Science Assessments

The Contractor shall prepare, revise, or review component or comprehensive documents that serve as baseline documentation for development of the EPA’s Integrated Science Assessments (ISAs). The ISAs and their supporting annexes provide a critical review and integration of multi-disciplinary scientific evidence from a large body of studies on the six criteria air pollutants (ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead). The ISAs provide critical inputs to decision making on the National Ambient Air Quality Standards (NAAQS) that are reviewed every 5 years.

The following activities may be required in development of ISAs:

- Development of literature searches for health and environmental information on the criteria air pollutants.
- Development of abstracts for relevant articles found in the literature searches.

- Use of HERO tools for literature identification, classification, and other bibliographic functions.
 - Making entries into HERO describing newly published studies to be incorporated into the ISA annex.
- Should other criteria pollutants be included in the studies, table entries shall be created for those as well.
- Preparation of sections of the ISAs. The contractors shall identify scientific and technical authors who are recognized nationally or internationally in their field(s), and who have both a general knowledge, as well as the specific knowledge, expertise, or experience specified in the work assignment. The selected author/consultant must have experience that includes authoring several journal articles or other technical documents that specifically relate to research on the criteria pollutant. During the development of the ISAs sections, the Contractor may be required to meet with the EPA and/or the document authors to discuss the document.

B. Risk Assessment Methods Research and Development

The Contractor shall provide scientific and technical support for the development of innovative human health risk assessment methodologies/procedures or the refinement and improvement of existing ones. Methodologies may be those that are commonly applied in the context of regulatory risk assessment, or they may be generated from the broader scientific area of risk analysis. Scientific products must be recognized, nationally and internationally, as scientifically sound and authoritative.

Specific tasks may include any of the following:

1. Research, development, and support of methods to improve risk assessment and reduce the uncertainty in the risk assessment approaches for cancer and noncancer toxic endpoints, and for chemical, physical and microbiological stressors. Examples include, but are not limited to, the following:
 - a) Develop improved understanding of physiological and biochemical processes and relate this knowledge to conventional EPA or other default approaches.
 - b) Improve risk assessment default approaches using physiological data, mechanistic information, human and animal molecular biomarker data, and conventional toxicological data.
 - c) Develop methods and perform route-to-route extrapolations for adverse effect indices such as RfD and RfC, and cancer unit risk.
 - d) Evaluate plausible modes of action and commonalities for cancer and noncancer endpoints.
 - e) Evaluate new methods for acute or subchronic effects assessment, as well as their relationship, if any, to chronic effects assessment methods.
 - f) Explore ways in which risk values may be made more usable to a wider variety of applications, recognizing the limitation of traditionally calculated values such as RfD.
 - g) Development and evaluation of mathematical and statistical methods to address human health or environmental risks. Expert, non-routine statistical analysis of relevant data. Expert development and evaluation of mathematical models to represent biological or environmental systems and processes.
2. Support research, development, and application of new risk assessment methods suitable for either

conducting or evaluating cumulative risk, microbial risk, mixtures risk, dose-response assessment (including extrapolation to low dose), exposure assessment, and relevant uncertainty analysis. Examples of such research include, but are not limited to, the following:

- a) Characterize, assess, and compare the infectious and acute and chronic disease risks associated with individual or concurrent exposure to pathogens and chemical contaminants.
- b) Evaluate exposure and health hazards from multiple exposure pathways, such as those associated with inhalation of vapors and particles, dermal contact, contamination of food chains, person-to-person transmission, and water and food contamination.
- c) Investigate and document the impact of model and parameter uncertainty on cancer and noncancer risk calculations, as well as risk characterizations.
- d) Research, develop, and investigate approaches for quantitative and qualitative uncertainty analysis.
- e) Validate or develop improvements to existing alternative methods, models, or approaches for risk assessment of single contaminant or mixture (multiple contaminants), or site specific situations.
- f) Develop guidance and methodologies for risk assessment, including delineating the range of assumptions, developing or improving upon existing statistical and or biologically-based models, analyzing data that provide the scientific basis for evaluating exposure or risk, and assuring scientific credibility in such endeavors.
- g) Develop statistical or mathematical models or methods applicable for testing uncertainty or variability in exposure and risk assessment.
- h) Conduct statistical analysis of routinely collected environmental health data and data from epidemiologic studies.
- i) Development and/or refinement of mathematical/microbiological/biological/chemical/physical methods/models [e.g., dose-response modeling techniques, such as benchmark dose, categorical regression, pharmacokinetics and pharmacodynamic models, or biologically based dose response (BBDR) models, bioavailability, environmental fate of microorganisms].

3. Perform research in exposure assessment:

- a) Develop or improve transport and fate models or modeling systems for environmental deposit of pollutants.
- b) Define human uptake or that of other species, including bioavailability and bioaccumulation.
- c) Improve identification and delineation of exposure patterns for human receptor populations and variances within subgroups.
- d) Develop or adapt extant pharmacokinetic models to address key exposure issues.
- e) Identify cumulative exposure situations and quantification of the duration, intensity, and frequency for situations in which people are exposed to multiple chemicals.

4. Perform research in public health outcomes:

- a) Identify critical links between source, exposure, and effect.
- b) Link human health risk assessment(s) to public health outcomes.

- c) Identify human health protection endpoints.
 - d) Link exposure to health outcomes.
 - e) Identify the most important environmental causes of disease.
 - f) Identify indicators of health status.
 - g) Define Risk management decisions.
5. Conduct statistical analyses and modeling, including experimental design, hypothesis testing, power calculations, linear and nonlinear regression modeling, risk characterization modeling, Monte Carlo simulations, outlier analyses, etc. Specific tasks may include, but are not limited to, the following:
- a) Conducting power calculations for toxicological tests on environmental contaminants.
 - b) Conducting hypothesis tests on toxicological data.
 - c) Using toxicological data, estimating departures from additivity or identifying contributions to toxicity by the unidentified fraction of a complex mixture.
 - d) Analyzing epidemiological data for statistically significant effects or exposure misclassification.
 - e) Conducting uncertainty analysis or a sensitivity analysis on environmental models
 - f) Analyzing chemical mixture data for chemical stability and similarity among mixtures.
 - g) Analyzing dose-response and/or exposure data for chemicals or microbial agents.

C. Risk Assessment Data Bases and Computer Tools

1. The Contractor shall provide technical support for EPA database development and maintenance of risk information systems, including, but not limited to, HERO, Health Effects Assessment Summary Tables (HEAST), the Mixtures Toxicologic Interactions Data Base (MIXTOX), and IRIS. Technical support may include collecting and entering data, organizing information, evaluating the literature and approaches used, re-evaluating and updating existing information, documenting meetings and conference calls that pertain to the development of information for databases, preparing tutorials or background materials for database users, supporting the planning and management of database collection and preparing supplementary information, extracting and evaluating information from the literature or documents, reviewing and responding to information from the literature or documents, and reviewing information submitted by outside organizations. Also inquiries and analyses of existing databases to address issues or glean data could be required.

2. The Contractor shall develop/refine fate and transport exposure models or exposure modeling systems, integrate such models into overall methods and guidance, apply models to real and/or hypothetical situations, and/or provide written guidance on the use of existing models to characterize direct and indirect exposures.

3. The Contractor shall develop or improve upon existing “smart” or user friendly exposure assessment tools and risk characterizing systems, e.g., RISK ASSISTANT, CALTOX.

4. The Contractor shall develop or maintain exposure assessment databases using expert data management

systems, e.g., Geographic Information System (GIS).

5. The Contractor shall conduct, investigate, or validate field studies for purposes of measuring or monitoring pollutants associated with the human health or the environment.

6. The Contractor shall conduct research on hydrogeologic features of contaminant transport, including karst terrains.

D. Analysis, Document and Issue Paper Preparation

The Contractor shall develop analyses, white papers, or toxicological reviews of specific health/exposure assessment topics. The proposed scientific and technical authors shall be recognized nationally or internationally in their fields, and they shall have the general knowledge, as well as the specific knowledge, expertise, or experience, specified in the work assignment. The selected author/consultant must have experience that includes authoring several journal articles or other technical documents that specifically relate to the topic. During the development of the documents or issue papers, the Contractor may be required to meet with the EPA and/or the authors to discuss the documents or issue papers. Subjects of documents or issue papers vary widely and will be defined specifically by the COR.

E. Risk Assessment Support

1. Science Writing, Risk Communication and Training

The Contractor shall provide scientific and technical support to enable the EPA to successfully communicate risk assessment research and health or ecological assessment information to individuals and organizations, both within and outside the risk assessment field. The Contractor shall prepare the information in a variety of formats to meet the specific needs of a range of audiences, including scientists, decision-makers, those unfamiliar with risk assessment, and those who are experts in the field. Examples of requested work products may include: announcements, posters, displays, fact sheets, leaflets, and brochures addressing a variety of risk assessment related topics. Information presented in paper form, electronic format (media or online), or video format may also be needed.

The Contractor shall be responsible for presenting information performed under this PWS in the form of symposia and workshops to the at-large science community.

2. Administration and Technical Support for NCEA Human Health Related Meetings

Contractor support shall include administrative and technical support for the NCEA human-health related meetings, such as workshops convened to address specific issues in risk assessment. Types of Contractor support shall include securing experts to support the tasks in the PWS; paying for the cost of expert services, including travel and applicable fees; securing facilities and equipment for meetings; serving as coordinator and facilitator of meetings; providing documents for review, developing written material for

meetings; and preparing summary reports or formal proceedings, as necessary.

3. Superfund Health Risk Technical Support Center

The Contractor shall provide Superfund health risk technical support as specified in specific work assignments. The responses prepared by the Contractor shall primarily focus on human health risk characterization, hazard identification, and exposure characterization pertinent to single and multiple contaminants at Superfund sites. The types of risk assessment information required typically include chronic and less-than-chronic noncancer risk assessments, cancer risk assessments, toxicologic risk assessments, and review of site-specific risk assessments. Responses shall also include a review and analysis of the scientific background information and provisional recommendations. Contractor response may be required on a rapid response basis. In terms of turnaround time, a "rapid response" will typically require a response within five (5) working days, but that will depend upon the specific technical issue. When needed, the Contractor shall provide scientific expertise related to site-specific Agency decisions, reviews, or on-site reviews.

F. Information Management

The Contractor shall provide support for data collection and compilation activities pertaining to all sections of the PWS. The Contractor shall be required to enter data into the HERO database and perform quality checks on this data. This will generally involve data extraction from primary and secondary sources and transcription to a conveniently-accessible format. Such formats will include off-the-shelf relational databases, spreadsheets, or word-processing software. This task may involve data evaluation, analysis, and transformation, as necessary for the particular application. The Contractor may also be required to reevaluate, update, document, and otherwise maintain existing or new information systems.

G. Literature Search

1. Specific Reporting Requirements

During the preparation of documents, reports, and other projects, the Contractor shall conduct toxicological, health, economic or exposure-specific literature searches. When such a search is required by a work assignment, the Contractor shall conduct literature searches to avoid missing key studies, retrieve pertinent articles, and provide abstracts and summaries as indicated below, unless otherwise directed.

To determine the extent and availability of information germane to specific tasks, the Contractor shall conduct extensive and exhaustive searches of all relevant databases consistent with the project level of effort. A specific plan for the search and retrieval of the relevant information shall be developed for each work assignment.

- a) Search the periodical literature for the period prescribed by the work assignment, using databases specified in the work assignment, as well as other available databases.

- b) Search for, within the specified period, domestic and international nonperiodical literature, such as books, technical reports, monographs, and conference and symposium proceedings prepared by select committees or bodies (e.g., such as those convened by the National Academy of Sciences, the World Health Organization, the National Science Foundation, the American Association for the Advancement of Science, the EPA Science Advisory Board, and other relevant professional and academic sources). Search for, within the specified period, all secondary sources designated in the work assignment.
- c) Search sources such as the Registry of Toxic Effects of Chemical Substances (RETCS), the National Cancer Institute, the National Institute of Environmental Health Sciences, the National Center for Toxicological Research, etc. for unpublished or interim research reports relevant to the subject of the search.
- d) Search the proceedings from toxicological, public health, microbiological, ecological, and economic conferences, meetings, and seminars on risk assessment; pertinent federal and state reports dealing with risk assessment studies, including relevant documents available from the Library of Congress, the Congressional Reporting Service, the Government Printing Office, academic sources (e.g., published and unpublished dissertations and theses), and all other published and unpublished or interim research reports relevant to the risk assessment subject matter detailed in the work assignment.
- e) As required in individual work assignments, the Contractor shall prepare an abstract of 150-300 words for each relevant article found. The abstract shall include the purpose, summarize major findings, and provide principal conclusions and recommendations.
- f) Use HERO to acquire and maintain literature used during the project. All literature shall be the property of the U.S. EPA and be governed by the copyright laws of the United States. Contractor shall have temporary use of the literature under the Fair Use Clause.
- g) When specified, the Contractor shall explore the application of newer web-based software developed for the linking of ideas and concepts within a selected body of literature.
- h) Where appropriate, the Contractor shall explore and apply methodologies for quantitatively summarizing related literatures on specific subject areas.
- i) Results of literature searches shall identify relevant scientific information and likewise exclude information that is not relevant to the science task. The Contractor shall implement procedures to efficiently screen out studies that may, for example, have key words in common with search criteria, but which do not provide information on search subject goals. The literature screened out shall be tagged and maintained by the Contractor in HERO.
- j) All search and screening strategies and results shall be saved and entered into HERO to enhance transparency.

2. Quality Assurance Requirements for Literature Review

During examination of the identified literature, the Contractor shall place primary emphasis upon the adequacy of study design, quality control, and interpretation of results of each study, and determine the article's relevance to the assessment of actual or projected exposure to the pollutants or subject under study. Primary literature sources shall be used exclusively, except in rare, extenuating circumstances. The work assignment shall include the details of the search strategy. The literature search and results – whether screened out or included – shall be maintained in HERO, along with the reasons why.

H. Physiologically-Based Pharmacokinetic (PBPK) Model Technical Support

Each work assignment from the EPA for pharmacokinetic (PK), PBPK, or biologically-based dose response (BBDR) model technical support will identify the purpose/objective of the work requested. For each specific area of interest, the Agency may request any or all of the following types of support in individual work assignments:

1. Initial PBPK Model Scoping and Evaluation

The Contractor shall provide an initial determination (or scoping) to identify available open source PK, PBPK, or BBDR models for a chemical of interest, the adequacy and appropriateness of the model(s) for potential use in the human health assessment, and what, if any, additional work might be needed to modify a model for a specific use.

Examples of topics and issues that shall be addressed in the initial scoping include the following:

- What is known about the toxicokinetics of the chemical of interest?
- What open source PK or PBPK model(s) are available for the chemical of interest, and what level of QA/QC have they undergone (e.g., peer review publication, regulatory agency review, etc.)?
- What are likely sensitive endpoints for the chemical under review, and what are the test species, exposure regimens, and routes of exposure from the initial identification of critical studies?
- Are identified models parameterized for the relevant test species (and/or humans), and for the potential route(s) of exposure that are relevant to humans?
- Are any of the identified models proprietary source models (i.e., where the code, data, or supporting documentation is not available to the public; this relates to requirements for transparency)?
- How extensively has the model been used and/or evaluated, what were the outcomes, and what documentation is available to review?
- Is further model development needed for each potential use in the assessment?
- What are the estimated time and people resources needed for full retrieval of model documentation, for evaluation, and for suggested modifications of the model for use in the assessment?

The Contractor shall conduct an initial survey of the literature to identify the extent and nature of the toxicokinetic data and hazardous effects data for specified chemicals, as well as available PK/PBPK models that have potential applications in the assessment. This work is not intended to be a full search and retrieval of all

relevant studies; rather it is intended as a broad overview of the literature sufficient to make an initial determination of the key features of the kinetics relative to the most sensitive endpoint(s) for hazardous effects, and an initial identification of potential candidates for the critical studies (and in particular, the species and strain of test animals) that could be used for derivation of a reference value. This information shall then support prioritization and selection of any available PBPK models for a more detailed model evaluation.

2. Detailed Model Evaluation

Selected models shall be further evaluated for quality and appropriateness for specific uses. Broad criteria presented in Clark et al. (2004), Chiu et al. (2007), and McLanahan et al. (2012), shall be used to evaluate the overall quality of the model; specific chemical toxicokinetic hazardous effects data shall be used to evaluate the appropriateness of the model for potential use in the assessment. This evaluation shall include model runs in the appropriate software (as specified by the EPA; e.g., acslX, MatLab) to reproduce published results, and to assure that the model code and computer implementation support model analysis and use. The evaluation may also include sensitivity analysis, and more specialized analyses (e.g., Monte Carlo, Bayesian) to duplicate previous results or to evaluate the model structure or parameter values. This work shall also include organizing and formatting the model code, supporting documentation, and data for entry into a model archive maintained at the EPA (details on the format requirements will be provided).

Based on the model evaluation results, the Contractor shall recommend which PBPK models are currently sufficient for specific uses in each assessment and, if not sufficient, what further development or modifications would be needed for specific uses in the assessment, along with an estimated level of effort to conduct that work.

3. Model Modification and Development

Based on a review of the evaluation reports, the EPA will identify specific models for application or for further development. The Contractor shall support the EPA in this work, which could include additional literature and data compilations, modifications to the model structure, recalibration and testing of the model against new data (or combinations of new and previous data), and application of the model for specific use in an assessment. As required, the Contractor shall also evaluate and support the use of quantitative structure-activity relationship (QSAR) models in the estimation of PBPK model parameters where chemical specific parameter values are not available, and a QSAR approach would further support the use of a PBPK model in the derivation of a reference value.

4. Information Resources and Methods Development or Support

The use of PK, PBPK, and BBDR models in risk assessment remains a relatively new approach, and there is a need for readily accessible and high quality resources to support model evaluations and development. Critical information resources that are being or have been developed at the EPA include: 1) a compilation of frequently used physiological parameter values (e.g., tissue volumes, blood flows, respiratory rates) and chemical specific toxicokinetic parameter values (e.g., enzyme activity, absorption, partitioning) in human and

nonhuman test species/strains for both the general population and for sensitive lifestages and subpopulations (e.g., early life, aged, pregnant); 2) an archive of PK/PBPK/BBDR models that have been or are being used in the development of health hazard assessments, including the supporting documentation and data used to develop and test the model; and 3) a glossary of PBPK model terms.

The Contractor shall support the maintenance and further elaboration of these resources and develop any additional resources or methods that the EPA determines will facilitate the development, evaluation, or use of PK, PBPK, and BBDR models in human health assessment. Examples of possible methods development are: approaches to improve the statistical rigor and ability to test hypotheses for model parameter identification and model structure identification; development of computational tools to facilitate the analysis of variability and uncertainty among human populations (i.e., for sensitive subpopulations vs. average, healthy adults); and approaches for facilitating the application of models in health assessments (i.e., to more quickly incorporate and propagate the impact of model changes through the model steps of a health assessment, of which the PBPK model is just one).

Concurrent with the search and retrieval of parameter databases and models, the Contractor shall compile and annotate new model references from the peer reviewed literature or other reputable sources to add to the EPA's HERO database of PBPK model references and to further augment the glossary of terms.

IV. PRODUCT QUALITY

A. General Risk Assessment Provisions

In the preparation of any of the scientific documents required by a work assignment, the Contractor may be required to provide the services of experts in the areas of epidemiology, toxicology, pharmacology, physiology, pathology, environmental microbiology, infectious disease, epidemiology, public health, decision analysis, quantitative uncertainty analysis, economics, statistics, biostatistics, chemistry, and mathematical modeling, including BMD modeling, PBPK modeling, and computational toxicology modeling. In many of the tasks, the scientific needs are highly specialized; this requires expert personnel with the knowledge and ability to fully and critically evaluate study methodologies and results in the technical disciplines identified above. Unless otherwise specified in a work assignment, products prepared must be state of the art analyses based on expert critical evaluation and analyses of the biological effects and health risks of the chemical or other stressor. As appropriate, the Contractor shall present qualitative and quantitative biological, toxicological, or biochemical evidence, as well as statistical analysis and a discussion of the strengths and weaknesses of pertinent studies, taking into account current EPA guidance on such matters.

Contaminant or site-specific documents and reports shall provide a scientifically defensible evaluation of the toxic potential of chemical/physical/microbiological pollutants. The quality of work products is expected to accurately reflect the state-of-the-art scientific knowledge and current risk assessment methods, including the approaches used by the US EPA. The Contractor may be required to apply newly developed methods in preparation of the documents.

Contaminant-specific reports may require detailed or concise summaries of available data in the areas of acute, subchronic, and chronic toxicity. In addition, detailed discussions of the chemical, physical, and pharmacokinetic/pharmacodynamic properties may be required. Exposure discussions may also be required, depending on the task. These may include summarizing concentrations in the environment and in food sources, rates of release to the environment, levels in human tissues, and exposure estimates for populations. This may involve analyzing pollutant sources and release rates, pollutant transport and fate, exposed populations and activity patterns, standard factors and scenarios, and use of previously determined health and health risk data to calculate overall risk to human health. When appropriate, comprehensive searches of all pertinent literature and data bases shall be performed. The data shall reflect the latest scientific knowledge obtainable. The literature shall be critically evaluated, and accepted EPA risk assessment guidance shall be applied to the data. In the absence of specific EPA guidance, procedures will be developed and applied upon approval by the PO.

B. Quality Assurance/ Quality Control Requirements

The Contractor is responsible for quality control and quality assurance of all tasks. The Contractor shall ensure that data generated or used for each work assignment is "of the type and quality needed and expected for their intended use" and that all assessment products adhere to a high standard for quality, including objectivity, utility, and integrity. All documents shall adhere to the OMB data quality guidance for federal information and with the EPA's Information Quality Guidelines.

As specified in each work assignment and prior to starting any work, the Contractor shall prepare either a Quality Assurance Project Plan (QAPP) or a narrative statement that describes the procedures to be used and a list of the data sources and methods. The Contractor must address in the work plan or QAPP how it is going to consider the quality of the secondary data that it uses, and how it is going to consider data uncertainty and variability. Secondary data is defined as the review or use of someone else's environmental or health data that was developed for a different purpose. This includes (but is not limited to) the data used from: citations from the literature searches, hard copies, and computer databases. After work has begun, the Contractor shall discuss and document in HERO the data quality and limitations of all studies used, and how each study was determined adequate to serve as an input for an assessment (see previous section III F and the list below).

Risk assessment is a technical analysis of many different kinds of scientific information of varying form and quality, all of which are used to characterize the expected risk to the public health and the environment. Such risk assessment analyses may result in scientific assessments that are less certain than ideal and, therefore, must be clearly identified as to the inherent strengths and weaknesses of their data quality and conclusions. All risk assessment products provided by the Contractor shall include information that will fully characterize the projected risks to the public health and the environment, and they shall specifically adhere to the following items:

1. Quantitative assessments shall be accompanied by descriptive information that provides an objective and balanced characterization of the results.
2. Key scientific information and controversies on data and methods (e.g., use of animal or human data,

extrapolating from high to low doses, use of pharmacokinetics data and certain quantitative methodologies) shall be highlighted along with a discussion of uncertainties, particularly those involving the quality of data, along with comments on their influence on the assessment.

3. When describing exposure scenarios, information shall be presented on the range of exposures and on the use of multiple risk descriptors, e.g., measures of central tendency, high end of individual risk, population risk, and important subgroups.
4. When describing stressor effects scenarios, information shall be presented on the range of impacts and on the evidence, incidence, and level of physical, chemical, or biological stressors.

C. Written and Electronic Products

The Contractor shall provide written and electronic products of high quality, written in a clear, concise style, with a logical organization and presentation of ideas and rationales. The Contractor shall:

1. Use standard formats as specified in “Handbook for Preparing Office of Research and Development Reports,” EPA/600/K-95/002, U.S. EPA (1995), or as specified in the work assignment.
2. Perform scientific and technical editing of all products.
3. Provide written products free of grammatical, spelling, and typographical errors, and accurately summarize the information with correct and complete reference citations.
4. Present scientific information in a consistent style that makes it easy for the reader to follow and pay specific attention to it to insure consistent and accurate information content, and appropriate data interpretation throughout the document.
5. Electronic products shall be entered into the HERO database or designated website using the EPA standards as specified in the work assignment.

Products not adhering to these standards or guidelines or substantially lacking scientific quality will not be accepted. The Contractor shall use current EPA methods and guidelines for performance of work, unless otherwise specified. The Contractor shall provide printed copies and an electronic copy of all completed work assignment documents prepared in Microsoft Word 2003, or a later version if requested, on compact disks.

V. REFERENCES

Chiu, W.A.; Barton, H.A.; DeWoskin, R.S.; Schlosser, P.; Thompson, C.M.; Sonawane, B.; Lipscomb, J.C.; Krishnan, K. 2007. Evaluation of physiologically based pharmacokinetic models for use in risk assessment. *J Appl Toxicol.* 27(3):218-37

Clark, L.H.; Setzer, R.W.; Barton, H.A. 2004. A framework for evaluation of physiologically-based pharmacokinetic models for use in safety or risk assessment. *Risk Anal.* 24(6):1697-717.

Dockins, C.; C. Griffiths; N. Owens; N. Simon; D. Axelrad. 2004. "Linking economics and risk assessment." *Journal of Toxicology and Environmental Health, Part A*, 67:611–620.

McLanahan, E.D.; El-Masri, H.E.; Sweeney, L.M.; Kopylev, L.Y.; Clewell, H.J.; Wambaugh, J.F.; Schlosser, P.M. 2012. Physiologically Based Pharmacokinetic Model Use in Risk Assessment – Why Being Published is Not Enough. *Toxicol Sci.* 126(1):5-15.

NRC (National Research Council). 1983. Risk assessment in the federal government: managing the process. Washington, DC: National Academy Press.

Rice, G.; M. Heberling; M. Rothermich; JM Wright; P. Murphy; M. Craun; G. Craun. 2006. "The Role of Disease Burden Measures in Future Estimates of Endemic Waterborne Disease." *Journal of Water and Health.*

US EPA Requirements for QA Project Plans (QA-R-5) EPA/240/B-01/003, March 2001, available at: <http://www.epa.gov/quality/qs-docs/r5-final.pdf>.

U.S. EPA. 1986a. Guidelines for the health risk assessment of chemical mixtures. *Federal Register* 51(185):34014-34025.

U.S. EPA. 1986b. Guidelines for mutagenicity risk assessment. *Federal Register* 51(185):34006-34012.

U.S. EPA. 1988. Recommendations for and documentation of biological values for use in risk assessment. Prepared by the Environmental Criteria and Assessment Office, Office of Health and Environmental Assessment, Cincinnati, OH for the Office of Solid Waste and Emergency Response, Washington, DC; EPA 600/6-87/008. Available from: the National Technical Information Service, Springfield, VA; PB88-179874/AS.

U.S. EPA. 1989. Interim methods for development of inhalation reference doses. Environmental Criteria and Assessment Office, Office of Health and Environmental Assessment, Research Triangle Park, NC; EPA/600/8-88/066F. Available at: <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 1991. Guidelines for developmental toxicity risk assessment. *Federal Register* 56(234):63798-63826.

U.S. EPA. 1992. Guidelines for Exposure Assessment. US EPA 600/Z/92/001. Available at: www.epa.gov/riskassessment/guidance.htm

U.S. EPA. 1994a. Interim policy for particle size and limit concentration issues in inhalation toxicity studies. *Federal Register* 59(206):53799.

U.S. EPA. 1994b. Methods for derivation of inhalation reference concentrations and application of inhalation dosimetry. Office of Research and Development, Washington, DC; EPA/600/8-90/066F. Available from: National Technical Information Service, Springfield, VA; PB2000-500023, and at <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 1995a. Use of the benchmark dose approach in health risk assessment. Risk Assessment Forum, Washington, DC; EPA/630/R-94/007. Available from: National Technical Information Service, Springfield, VA; PB95-213765, and at <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 1995b. Handbook for Preparing Office of Research and Development Reports, 3rd ed. EPA/600/K-95/002.

U.S. EPA. 1996. Guidelines for reproductive toxicity risk assessment. Federal Register 61(212):56274-56322.

U.S. EPA. 1998a. Guidelines for neurotoxicity risk assessment. Federal Register 63(93):26926-26954.

U.S. EPA. 1999. Higher-level Contract Quality Requirement. FAR 46.202-4 and FAR 52.246-11.

U.S. EPA. 2000a. Guidelines for Preparing Economic Analyses. U.S. Environmental Protection Agency, Washington, DC. EPA/240/R-00/003. Available at: <http://yosemite.epa.gov/ee/epa/eed.nsf/pages/guidelines.html>

U.S. EPA. 2000b. Science policy council handbook: risk characterization. Office of Science Policy, Office of Research and Development, Washington, DC; EPA 100-B-00-002. Available at: <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 2000c. Benchmark dose technical guidance document [external review draft]. Risk Assessment Forum, Washington, DC; EPA/630/R-00/001. Available at: <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 2000d. Supplementary guidance for conducting health risk assessment of chemical mixtures. Risk Assessment Forum, Washington, DC; EPA/630/R-00/002. Available at: <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 2002. A review of the reference dose and reference concentration processes. Risk Assessment Forum, Washington, DC; EPA/630/P-02/0002F. Available at: <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 2005a. Guidelines for carcinogen risk assessment. Risk Assessment Forum, Washington, DC; EPA/630/P-03/001B. Available at: <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 2005b. Supplemental guidance for assessing susceptibility from early-life exposure to carcinogens. Risk Assessment Forum, Washington, DC; EPA/630/R-03/003F. Available at: <http://www.epa.gov/iris/backgr-d.htm>.

U.S. EPA. 2006a. Integrated Risk Information System (IRIS). Accessed March 9, 2006. Available at: <http://epa.gov/iriswebp/iris/index.html> .

USEPA. 2006b. Approaches for the Application of Physiologically Based Pharmacokinetic (PBPK) Models and Supporting Data in Risk Assessment. EPA/600/R-05/043F. U.S. Environmental Protection Agency, Washington, DC. Available at <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=157668> .

ⁱ HUMAN SUBJECTS:

The Contractor must agree to meet all EPA requirements for studies using human subjects prior to implementing any work with human subjects. These requirements are contained in 40 CFR Section 26. Studies involving intentional exposure of human subjects who are children or pregnant or nursing women are prohibited by Subpart B of 40 CFR Section 26. For observational studies involving children or pregnant women and fetuses, refer to Subparts C & D of 40 CFR Sections 26. The US Department of Health and Human Services regulations at 45 CFR Section 46.101(e) have long required "...compliance with pertinent Federal laws or regulations which provide additional protections for human subjects." The EPA regulations at 40 CFR Section 26 is such a pertinent Federal regulation. Therefore, the Contractor's Institutional Review Board (IRB) approval must state that the Contractor's study meets the EPA regulations at 40 CFR Sections 26. No work involving human subjects, including recruiting, may be initiated before the EPA receives a copy of the Contractor's IBR approval of the project, and the EPA has also provided its approval to perform such. Where human subjects are involved in the research, the recipient must provide evidence of subsequent IBR reviews, including amendments or minor protocol changes as part of annual reports.

Guidance and training for investigators conducting EPA funded research involving human subjects may be obtained here: www.epa.gov/phre.